Contemporary Psychology

A JOURNAL OF REVIEWS

	Page	201	Theories of Personality, by C. S. Hall and Gardner Lindzey Reviewed by H. L. Ansbacher
August 1957 (DLUME II - NUMBER 6		203	Basic Psychology, by Leonard Carmichael Reviewed by G. T. Morgan
		205	Psychology of Humar Behavior for Nurses, by Lorraine B. Dennis Reviewed by T. S. Conn
		205	One Marriage, Two Faiths: Guidance on Interfaith Marriage, by J. H. S. Bossard and Eleanor S. Boll Reviewed by Arriage Schwarz
		206	The Nature and Conditions of Learning, by H. L. Kingsley and Ralph Gerry Reviewed by J. C. STANLEY
		207	Contemporary Psychotherapists Examine Themselves, by Werner Wolff Reviewed by H. H. Straupp
		208	Psychology: General, Industrial, Social, by J. M. Fraser Reviewed by H. G. Millian
			Psychology in the Classroom: A Magnal for Teachers

(Continued on inside cover)

EDWIN G. BORING, Editor Harvard University

EDITH L. ANNIN, Assistant to the Editor

ADOLPH MANOIL, Film Editor Park College

Editorial Consultants

FRANK A. BEACH, Yale University

PETER A. BERTOCCI, Boston University

JUDSON S. BROWN, State University of Long

ROGER W. BROWN, Harvard University

CLAUDE E. BUXTON, Yale University

JACK W. DUNLAP, Stamford, Conn.

RICHARD M. ELLIOTT, University of Minnesota

ANN M. GARNER, Lincoln, Neb

FRANK A. GELDARD, University of Virginia

DANIEL KATZ, University of Michigan

E. LOWELL KELLY, University of Michi-

DONALD W. MACKINNON, University of California

MELVIN H. MARX, University of Missouri

Douglas McGregor, Massachusetts Institute of Technology

QUINN McNEMAR, Stanford University

CLIFFORD T. MORGAN, The Johns Hopkins University

CHARLES E. OSGOOD, University of Illi-

FILLMORE H. SANFORD, Cambridge, Mass.

NEVITT SANFORD, University of California

ROBERT R. SEARS, Stanford University

HAROLD SEASHORE, New York, N. Y.

S. SMITH STEVENS, Harvard University

DONALD E. SUPER, Teachers College, Columbia University

GEORGE G. THOMPSON, Syracuse University

RUTH S. TOLMAN, Pasadena, California

BENTON J. UNDERWOOD, Northwestern University

S. RAINS WALLACE, JR., Hartford, Conn.

ROBERT W. WHITE, Harvard University

ARTHUR C. HOFFMAN, Managing Editor

HELEN ORR, Assistant Managing Editor Editorial Staff: FRANCES H. CLARK, BARBARA CUMMINGS, SADIE J. DOYLE

CONTENTS-continued

CP SPEAKS ... 210 By the EDITOR

- 212 The Foundations of Science and the Concepts of Psychology and Psychoanalysis, by Herbert Feigl and Michael Scriven (Eds.) Reviewed by Bradley Reynolds
- 213 Toward Better Personal Adjustment, by H. W. Bernard Reviewed by W. W. WATTENBERG
- The Evolution of Human Nature, by C. J. Herrick 214 Reviewed by J. J. JENKINS
- 215 Microcard Publications of Primary Records in Culture and Personality, by Bert Kaplan (Ed.) Reviewed by ALEX INKELES
- Information Theory: Third London Symposium, 1955, 216 by Colin Cherry (Ed.) Reviewed by F. C. Frick
- Leadership Patterns and Organizational Effectiveness; 217 Planning and Training for Effective Leadership; Training in Human Relations; Psychological Surveys in Business Forecasting; Training Foreign Nationals in the United States, by Foundation for Research on Human Behavior Reviewed by W. E. KENDALL
- The Organization of the Cerebral Cortex, by D. A. Sholl 217 Reviewed by George Clark
- 218 Emotion and Meaning in Music, by L. B. Meyer Reviewed by Leona E. Tyler
- 220 The Focused Interview: A Manual of Problems and Procedures, by R. K. Merton, Marjorie Fiske, and Patricia L. Kendall Reviewed by C. G. McClintock
- 222 FILMS Reviewed by Adolph Manoil, Film Editor Film Review Films and Other Materials
- 223 List of Books Received

Books for review, review manuscripts, letters for publication, and correspondence concerning editorial matters should be sent to the Editor, Edwin G. Boring, Memorial Hall, Harvard University, Cambridge 38, Mass.

bridge 38, Mass.

Films for review and correspondence concerning films should be sent to the Film Editor, Adolph Manoil, Park College, Parkville, Mo.

Communications concerning subscriptions, change of address, claims for the nonreceipt of a number, advertising, and other business matters should be sent to the American Psychological Association, Inc., 1333 Sixteenth Street, N.W., Washington 6, D. C. Address changes must reach the Subscription Office by the 10th of the month to take effect the following month.

Contemporary Psychology: A Journal of Reviews is published monthly. The yearly volume comprises approximately 384 pages. The subscription per year is \$5.00, foreign \$8.50, single number \$1.00.

Published by the American Psychological Association at Mt. Royal and Guilford Avenues, Baltimore 2, Maryland and 1333 Sixteenth St., N.W., Washington 6, D. C.

Second-class mail privileges authorized at Baltimore 33, Maryland. Accepted for mailing at special postage rate stated in section 132.122, Postal Manual.

© 1957 by the American Psychological Association, Inc.

Contemporary Psychology

A JOURNAL OF REVIEWS

VOLUME II

August 1957

NUMBER 8

A Farrago of Personality Theories

Calvin S. Hall and Gardner Lindzey

Theories of Personality. New York: John Wiley & Sons, 1957. Pp. xi + 572. \$6.50.

Reviewed by HEINZ L. ANSBACHER

Dr. Ansbacher, who is Professor of Psychology at the University of Vermont, has long been interested in theory of personality. In collaboration with his wife he has recently published The Individual Psychology of Alfred Adler (CP, 1957, 2, 1-4). He presents himself here as a tender-minded psychologist commenting on the work of two tough-minded authors, as a holist standing firm against positivists. He is editor of the new Journal of Individual Psychology, which is devoted to "a holistic, phenomenological, teleological, field-theoretical, and socially oriented approach to psychology and related fields." Now do you know what he's like?

If, in accordance with the commendable trend of today, we attempt to reduce the overlap among psychology courses, just what is left for a course in personality? When child, abnormal, and social psychology, psychological tests, and possibly the psychology of adjustment are offered, as they are in the typical college curriculum, there still remains for the course in personality the important area of theory—theory of personality.

Such a theory-oriented course can be taught either vertically or horizontally. The instructor may expound one theory, follow it into all its ramifications and implications, and then, in fairness to the subject-matter and the students, draw parallels to other theories. That is the

vertical approach. Or he may give a survey of theories, as recommended in the 1952 report of the study group on Improving Undergraduate Instruction in Psychology, of which Dael Wolfle was chairman, the horizontal procedure. In either case a good book reviewing the important theories is highly desirable, whether as the main text for the horizontal course, or as essential supplementary reading for the vertical one.

Hall and Lindzey's Theories of Personality is the first book to fill this needwhich is precisely their purpose. Up to now the systematic comparative presentations have been limited to the socalled psychoanalytic theories, continuing an intrinsically artificial distinction between these and other theories of personality, while the more general treatments consisted of books of readings or symposia, all with their well-known inherent inadequacies. Not only does the present book fill the existing need, but, one may say, it will influence the planning of courses and curricula in the indicated desirable direction.

The great merit of the book is that it deals with each theory, insofar as possible, according to a common outline: an introduction (which includes the biography of its originator), personality structure, dynamics, development, characteristic research and research methods, and current status and evaluation. Such treat-

ment gives lucidity to a difficult subject matter and provides a most convenient means for comparative study. For their material the authors went to the most relevant and recent primary sources, and they give ample quotations and references.

As the smooth working and easy use of any product attest to the pains and competence of its producer, so here the scope and hard work of the authors must be especially appreciated if we consider that in their original form the theories appear typically in anything but a straightforward and orderly manner—as indeed the authors remind us.

HE theories are presented in twelve chapters and in the following order: Freud; Jung; Adler, Fromm, Horney, and Sullivan; Murray; Lewin; Gordon Allport; Goldstein, and Angyal, with briefer mentions of Maslow and of Lecky; Sheldon; Eysenck, and Cattell; Dollard and Miller, with briefer mentions of Sears and of Mowrer; Rogers; and finally Murphy. The authors' selection was guided by their judgment of the present-day importance and distinctiveness of a theory: if it can be criticized, so could any other conceivable selection of theories. The authors assure us that the length of treatment was determined by the intrinsic requirements of the material and not by their judgment of its relative importance.

Each theory is presented equally in a positive light, which this reviewer noted particularly in reference to Jung and to Adler, and the final evaluation of each view gives the main objections which can be raised against it, mostly in the third person. Thus the authors strive toward complete objectivity.

To what extent is such objectivity possible? In the opening chapter, which deals with the basic principles of science as applied to the study of personality, the authors themselves state: "There is no such thing as 'no theory'; consequently, the moment we attempt to forget about theory 'for the present' we are really using implicit, personally determined, and perhaps inconsistent assumptions concerning behavior and these unidentified assumptions will determine what will be studied and how."

Surely this statement is true and can be enlarged to hold for the approach to theories of personality. Thus there arises the further question as to the authors' own theoretical position. They indicate where they stand when they say that their conception of science is "colored heavily by the teachings of logical positivism." So it comes about that, in spite of the largely realized intent of the authors toward objectivity in the presentation of the theories, the book nevertheless assumes a positivistic slant. It is here that the reviewer's criticism sets in, oriented as he is toward holistic, organismic, and cognitive theory in general.

The positivistic cast of the book becomes most evident from the authors' ultimate criterion for the value of a theory as its "capacity to generate new research." They note that the "literary brilliance" of the theorist is a possible alternative, one which they reject. They recognize no other criterion. And yet in their introductory discussion regarding the functions of a theory they have already included the statements that a theory should serve as "a means of organizing and integrating all that is known" and should lead to the "observation of relevant empirical relations not yet observed." Surely the criterion of a personality theory should include both these functions. The research criterion which the authors apply throughout the book omits the first function entirely and in-

cludes only a part of the second. In respect of the second it creates a distinction between ordinary observation and the type available only to the trained specialist, implying that only the specialist is capable of observing new facts and relationships. While this rule may be true in chemistry, it is decidedly not the case in the area of personality. A personality theory may well enable a layman to make new relevant observations about a given individual, a fact which importantly attests the goodness of the theory. Not only is this potential general value of a theory, as well as its usefulness in diagnosis and treatment, disregarded by the authors, but they go so far as to list among the criticisms of a theory that it be found to be in agreement with common observation.

It might be taken as a second sign of the authors' position that the book shows no over-all order of presentation of the theories. Neither does the summary table, in which the authors rate the theories for eighteen attributes or dimensions separately, produce any meaningful over-all pattern, even when the ratings are summed (as the reviewer undertook to do in several different attempts). Such apparent disorder is encountered more frequently, so the reviewer thinks, by the theorist who is guided by nothing but the 'facts,' without looking for underlying coherences, who looks for phenotypes rather than searching for genotypes. Such an approach is evidenced, for example, by the authors' choice of some of the dimensions and their ratings, as in the case of "emphasis on biology." This attribute cannot be considered a clarifying dimension when Freud and Goldstein are both rated high in respect of it, although their conceptions of biology are in fact antithetical.

The authors admit that they have presented in this volume a "welter of contradictory ideas" among which the student must choose in the end, but they claim such a welter to be a picture of

the field "as it really exists." The alternative, in their eyes, would have been to present a single view of personality, thus giving the student "a false sense of harmony." A third possibility they do not mention, that personality theories, diverse as they are, may nevertheless fall into some sort of organization.

And yet, throughout the book the authors indicate, although apparently quite unawares, the existence of an underlying, genotypical order. It corresponds to James' distinction between toughminded and tender-minded, a distinction which subsumes among others the dimension of pessimism-optimism. They apply the designation tough-minded (in the form of praise) to S-R and factor theories, while the category optimistic-sugarcoated-too-little-of-the-positivist is applied (for the most part critically) to Jung, Allport, Lecky, Maslow, Rogers, Adler, Fromm, Horney, and Murray. This scheme is not too different from Hilgard's, whose work on learning the authors hoped to parallel, and who found that learning theories fall essentially into two families, the S-R and the cognitive. The reviewer agrees with such a scheme (except for a reversal of the values) and believes that the remaining personality theories could be fitted into it. Freud, for example, with his positivism, determinism, and pessimism, would belong among the tough-minded; Murphy, with his principle of emergence, 'soft' determinism, and optimism (all three not mentioned by the authors), among the tenderminded.

Once the authors' theoretical position and its effects are recognized, we can return to the appreciation of their accomplishment. Undoubtedly a 'toughminded' reviewer would have been unqualifiedly tender in his discussion of their book, but, be he tough or tender, anyone who has been looking for a good survey of contemporary personality theories will be enormously grateful to these authors for having provided it in an eminently useful form.

The test of an author is not to be found in the number of his phrases that pass current in the corner of newspapers...but in the number of passages that have really taken root in younger minds.

-Thomas Wentworth Higginson

Primer for Sophisticates

Leonard Carmichael

Basic Psychology. New York: Random House, 1957. Pp. 340. \$3.95.

Reviewed by CLIFFORD T. MORGAN

Dr. Morgan, besides being Consulting Editor for McGraw-Hill's Series in Psychology and Fellow in Psychology at the Johns Hopkins University, writes papers and books, including the McGraw-Hill Introduction to Psychology (CP, 1956, 195–197), an achievement that entitles him to take this critical look at another man's elementary account of what he thinks psychology is.

This book, written by a well-known experimental psychologist who also has been a university president and is now Secretary of the Smithsonian Institution, is "intended to serve as a nontechnical introduction to the psychology of the normal, adult, civilized person of our time." At first glance, it appears to serve well its intended purpose. It is only a hundred thousand words or so longhardly half the length of the typical introductory textbook. It has no graphs or charts to frighten the nontechnical reader -but it has no pictures to entertain him with either-and only three tables, all on the interesting topic of sex differences. Some of the writing, especially in the early chapters, has a popular flavor; it often explains technical matters in relatively simple, nontechnical English. And it does not have the usual headings of the textbook; you read along in uninterrupted paragraphs as you would a novel.

If you settle down to a careful reading of the book, however, you soon discover that it is not so 'nontechnical' as it first appears. As Carmichael frankly states in his preface, "The fundamental point of view of this book is that of biological or physiological psychology." Of the first ten chapters (half the book), two that are entitled Looking Through the Skull and The Brain and the Mind deal with nervo impulses, sensory mechanisms, homeostasis, and central neural functions—the usual physiological material in the general

course. After that come two chapters on development, The Growth of the Mind in the Evolutionary Series and The Growth of the Mind in the Individual, both biologically oriented. Another pair on Emotion and The Drives and Motives of Behavior are about as physiological as similar chapters in elementary textbooks ever get. Moreover, in almost every chapter of the book, even the chapters that might be regarded as 'applied,' some reference is made to animal or physiological experiments.

Although a few chapter titles are popularly phrased and a few others are not exactly textbook titles, most of the titles and almost all of the content of the book are about what you find in introductory texts on general and applied psychology. In fact, the book covers roughly the same ground as a whole-year sequence that begins with a general introduction to psychology and ends with a survey of its various fields. In addition to the physiological chapters, the first half of the book otherwise covers the topics of scientific method, schools of psychology, perception, and learning and memory. The 'applied' chapters, making up the latter half of the book, deal with such topics as language and communication, personality and intelligence, abnormal behavior and psychoanalysis, value judgments, economics, marketing and advertising, sex differences, human engineering and efficiency, and "adaptive social life." In neither its general nor its 'applied' chapters, however, is the book as 'applied' as many current beginning textbooks, for it gives the reader rather few concrete illustrations and applications of psychological principles to the problems of everyday interest. The applied chapters, on the contrary, emphasize the philosophy, purpose, and underlying theory of applied psychology more than practical results.

Despite the technical nature of physiological psychology, Carmichael, in his attempt to write a 'non-technical' book, is at his best in his early physiological chapters. Here his sentences are usually clear and to the point, and here he employs effective devices for teaching the facts of nerve-impulses and brain-functions. Any intelligent layman who is interested in this sort of information will find these chapters palatable and easy going. By comparison, the later chapters suffer; in these, the sentences are more often cumbersome and stilted. and the author has not so effectively used analogies, illustrations, and other teaching devices to put his points across.

ERHAPS this weakness of the book is indirectly the product of its great strength—the relatively enormous amount of material, much of it 'technical,' that is condensed into its brief volume. Indeed, the total number of ideas, terms, and concepts that Carmichael mentions or discusses must come pretty close to the number covered in one of the stiffer, whole-year courses in psychology. Here, for example, are a score of items selected from the index: Amblystoma, Aufgabe, brain-field theory, Broca's area, cerebellum, conation, dynamogenic effect, electroencephalogram, earthworm (learning in), Cannon-Bard theory, hormic behaviorism, kinesthesis, meprobamate, nystagmus movements, operant conditioning, order-of-merit method, phototropic behavior, reserpine, retroactive inhibition, retrograde amnesia, transactional approach (to perception), tribal self, zoöphobia. Here we gain an idea of the relatively large number of difficult concepts that Carmichael attempts to treat in this "nontechnical introduction" to psychology.

In addition to this rather broad coverage of psychological concepts, the account of psychology is also impressive for its historical and literary scholarship. Although Carmichael makes no attempt to cite current, original literature and refers to but a mere handful of recent books, he leans heavily on the history of psychology, philosophy, and science, and even borrows occasionally from literary sources. Among the names of the great that he mentions, and sometimes discusses, are Aristotle, Francis Bacon, Bain, Berkeley, Claude Bernard, Breuer,

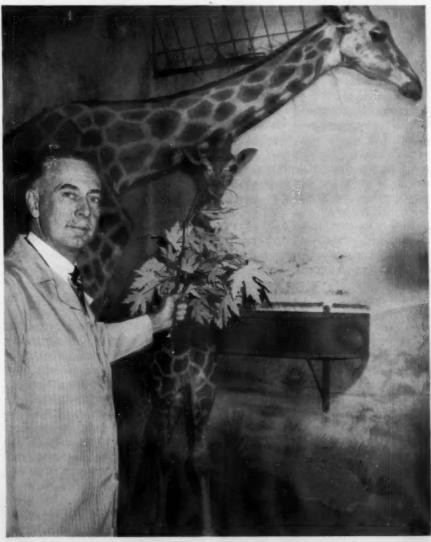
Charcot, Coleridge, Darwin, Descartes, Flourens, Sir James G. Frazier, Head, Hobbes, William James, Janet, Kant, Locke, the two Mills, Johannes Müller, Newton, Plato, Shakespeare, Sherrington, and Adam Smith. What Carmichael says about the thinking, writing, and personal experiences of some of the progenitors of modern psychology often makes interesting reading.

On the other hand, the author's emphasis on classical sources has meant, apparently, that he had to give short shrift to current activities in psychology. Certainly many recent and important developments have been omitted. The chapter on language and communication, for example, covers the origin of language in infants and primitive peoples and also the problem of meaning (in the vein of Ogden and Richards), but it says nothing about psychoacoustics or information theory. Relatively little attention is given the methods and accomplishments of personnel psychology. The two chapters on abnormal psychology say much about Freudianism and its offshoots, though not too sympathetically, and they cover the symptoms of abnormal behavior, but they hardly mention psychodiagnostics or psychotherapy. The chapter on psychology and economics gives Adam Smith, Jeremy Bentham, and James Mill their due, then goes on to talk about B. F. Skinner's variable schedules of pay, neglecting to mention Katona or any of the recent research in 'economic psychology.' The chapter on human engineering, efficiency, and fatigue makes hardly any direct reference to the kinds of work that present-day 'human engineers' are doing so successfully. Quite obviously, Carmichael was not attempting to present an up-to-date, journalistic report of current activities in psychology (for he is certainly aware of them), even though he will surely disappoint the many intelligent readers who are interested in the current uses of psychology.

Which brings me to the question of whom this book is really for. It is too scholarly, too physiological, too compactly technical, and too academically written to suit the tastes of the great majority of intelligent laymen. They could be reached better with a livelier and more forceful style and with content that comes

a little closer to the problems and events they live with. The 'layman' who reads and enjoys this book would surely need already to have a built-in interest in academic psychology, for he must be willing to work quite a bit harder than he does in reading Harpers, Reader's Digest, or the Saturday Review, and he ought to know something about academic psychology in the first place.

Who is such a person? Probably the best candidate is the college graduate who had a course in psychology some years ago and would like to brush up on it. For him, the book will revive memories of what he once learned and fill in some points he missed the first time. The volume would be excellent, too, for students in other disciplines who seek a bird's-eye view of psychology. Such people, accustomed to serious, not-too-easy reading, could take these chapters in their stride. I wish, for example, that I had had this book at hand when a professor of philosophy, who had never gotten beyond the psychology of William James and John B. Watson, asked me some time ago what he could read to 'catch up' on psychology. The book might similarly be good reading for professors of natural and social sciences, especially when they are sitting on committees concerned with



Leonard Carmichael

Learned (left) and unlearned behavior at the National Zoological Park

—Courtesy of the Smithsonian Institution

promotions or curricular matters in psychology. It would bridge the gap between their rusty or non-existent knowledge of psychology and the minimum understanding that it would be well for them to have. Carmichael speaks so often of the "well educated" man that he must have had such devotees of the arts and sciences in mind as he wrote.

So what? Here we have no 'popular' book on psychology for the so-called intelligent layman, yet an extremely competent, scholarly condensation of the more classical subject-matter of general and applied psychology. As such, it should appeal to the well-educated adult who is possessed of a serious, intellectual interest in psychology.

Freud for Florence Nightingale

Lorraine Bradt Dennis

Psychology of Human Behavior for Nurses. Philadelphia: W. B. Saunders, 1957. Pp. x + 250. \$3.50.

Reviewed by THOMAS S. COHN

who is Assistant Professor of Psychology at Wayne State University in Detroit, and who has had lots and lots of experience in teaching introductory psychology to nurses. He is also interested in symbols, gifted children, and leadership, was once involved with the Michigan Research Center for Group Dynamics, and, with C. G. Browne, has a book of readings on leadership due out any day now.

In spite of its title, the content of this book more closely resembles a text on adjustment than a general introductory one. Perception and learning, for instance, are omitted topics, while Freudian psychosexual theory and defense mechanisms receive a disproportionate amount of space.

The chapters on motivation, emotion, and frustration seem to this reviewer to be somewhat obsolete. In the motivation chapter seven basic needs are presented in a manner reminiscent of the lists of instincts cited thirty years ago. The criterion for including a need is that of individual survival value, a principle that could result in the omission of sex. The

author, however, saves sex as a basic need by introducing race survival as a criterion.

The chapter on frustration points out that tension results from frustration and is an "uncomfortable inner state that people have reference [to] when they say, 'I feel frustrated.'" Those individuals who seek for some degree of tension are not discussed and, instead, the author presents life as a constant attempt to avoid tension and to 'get back on even keel.' This statement reflects a basic defect of the text, namely, the tendency to make absolute statements. In addition, the lack of anthropological evidence is unfortunate.

Other difficulties encountered lay primarily in the methods of documentation. Analogies, frequently used, end up too often as the evidence. Thus the analogy of the elaborate cellular structure of man to his complex behavior is suggested as the cause of the complexity of man's behavior. Terms which denote processes are too often reified, e.g., one gets a hazy notion of defense mechanisms and needs as entities floating around in the organism. There are occasional flat statements which do not jibe with present deterministic thinking, such as, "The complexity of man, the many factors which influence his learning and therefore his behavior, the impossibility of ever discovering all of these factors. . . ." The author's nursing background and allegiance to the medical profession are reflected in this distinction: "It is still used extensively by parents, friends, teachers, ministers, and even by some doctors and psychologists" (italics mine).

Despite these many deficiencies, some psychologists will find this book useful for a nurses' course on adjustment or mental hygiene. The book is definitely directed toward the nursing group with many interesting applications of psychological principles to the function of the nurse in the hospital. It includes an interesting chapter on psychosomatic medicine as well as a number of passages which suggest that the nurse play the role of diagnostician and therapist for patients undergoing physical treatment.

Finally, it should be noted that the text is simple and easily understood and, although it contains no charts or pictures, the cartoons which illustrate the different chapters are excellent and to the point.

A House Divided?

James H. S. Bossard and Eleanor Stoker Boll

One Marriage, Two Faiths: Guidance on Interfaith Marriage. New York: Ronald Press, 1957. Pp. vii + 180. \$3.50.

Reviewed by ARTHUR SCHWARTZ

who is attached to the Educational Clinic of the College of the City of New York and who has been concerned with the problems of marriage in both Boston and New York. He thinks that too often, when there is marital disharmony, the remedial approach is directed immediately at the marriage problem when it should be attempting to understand the basic needs and characteristics of the two personalities involved.

THIS extremely readable and wellwritten book, subtitled Guidance on Interfaith Marriages, is presented as an answer to the questions raised by the ever-increasing number of young people with different religious affiliations who are marrying. While the authors state that they are neither advocating nor condemning such intermarriage, it soon becomes clear where their feelings in this matter lie. They are opposed to the growing trend, and this volume is, in effect, advice to young people to reconsider this kind of intermarriage and, if possible, to avoid it. They give concrete examples to illustrate their point of view. In addition to quoting all the injunctions placed upon intermarriage by the major churches, the authors start the volume with six cases showing unhappy results. They show relationships that could occur in any marriage but in each of these cases, which turned out to be a failure, intermarriage is cited as the main cause. Perhaps the authors are right, yet, even in these six selected situations, there were other aggravating causes that could have led to the disruption of the marriage regardless of the partners' religions.

Near the end of the volume the authors cite six cases of solutions that have worked. Each case is indicative of one of the six possible methods of solution: (1) where one accepts the religion of the other, (2) where the partners live in a relative social isolation, (3) where there

is a you-go-your-way-I'll-go-mine feeling, (4) where the couple has no children, (5) where there is an indifference to religion, and (6) where there is give-andtake. With each of these successful intermarriages the authors raise, however, many questions as to the underlying feelings of the partners, the real worth and truth of the adjustment, and the amount of psychological defenses that have been called into play. They cast a doubt on each of the so-called solutions in each case, in addition to suggesting that the solutions themselves carry a penalty.

The strongest part of the book is the section where the authors discuss the changing patterns of mate selection and state clearly why the churches are so opposed to this trend. They draw heavily upon their vast experience and insights to state that religion is but one of many factors involved in marital adjustment, although they do indeed play down these other factors.

No one would deny that the burden of reconciling religious differences, along with the implied cultural differences, added to the other adjustments that marriage demands, is indeed an enormous labor. The divorce rate is higher among mixed marriages-Goode, Bernard, and many others testify to this fact. The trend is continuing, but we have no true idea of its actual frequency nor, as is more important, of its relevance to the increasing divorce rate when it is balanced against the other factors influencing family and marital happiness today.

Anis is a problem that fairly screams for organized, disciplined research of the type that Goode did with divorces in Detroit or as Bossard himself did with Lutheran pastors with this same problem (Marriage and Family Living, 1956, 18, 308-310). Certainly such an undertaking would have the cooperation of the church groups involved. Such research would be of invaluable help to marriage counselors, psychologists, psychiatrists, caseworkers-to anyone who has to deal with any aspect of family problems today. Until we can have these data, volumes such as this one must be read with the qualification that the conclusions are not certain but represent, rather, the intuitive and experiential reactions of the authors.

Coauthorship Without Collaboration

Howard L. Kingsley and Ralph Garry

The Nature and Conditions of Learning. (2nd ed.) Englewood Cliffs, N. J.: Prentice-Hall, 1957. Pp. ix + 565. \$6.75.

Reeviwed by Julian C. Stanley

Dr. Stanley is Associate Professor of Education in the University of Wisconsin and has long been engaged in research and writing in educational psychology. With W. O. Jenkins he did the review and critique of partial reinforcement in the Psychological Bulletin in 1950, and more recently he has revised C. C. Ross's Measurement in Today's Schools after Ross's death, another case of coauthorship without collaboration.

K ingley's first edition of this text-book (1946) met the needs of certain graduate students, particularly those in education, for whom such works as McGeoch's The Psychology of Human Learning and Hilgard's Theories of Learning were not sufficiently applied or discursive.

This revision by Garry, an educational psychologist at Boston University who took his PhD at Stanford, should appeal to a similar but even wider audience. Prospective users will of course want to compare it for their purposes with Hilgard's second editions and Irion's revision of McGeoch, as well as with the Thorpe-Schmuller Contemporary Theories of Learning and Stephen's revised Educational Psychology.

This edition differs substantially from its Kingsley predecessor, not in size, but because of deleted, reorganized, and rewritten material. The 36 pages on conditioning have been replaced by a few remarks. Nine of the 17 chapters-all but one of them in the final Part 3-have titles unchanged but content altered moderately. Parts 1 and 2 were modified extensively. One-fourth of the references in the 500-item bibliography were published after 1943; suggested readings are more modern.

Though the word theory did not appear in Kingsley's subject index, he dealt at considerable length with Thorndike's work and to a lesser extent with Tolman's, Hull's, and Guthrie's. Garry devotes a 45-page chapter, entitled Theories of Learning, to these men, Lewin, and the Gestalt psychologists. B. F. Skinner's name does not appear in that chapter or in the author index.

Revising someone else's popular textbook (with or without the aid of a necromancer) poses numerous problems. If the reviser rewrites the volume completely, it may no longer appeal to its original users. On the other hand, if he fails to update it a great deal, more recent texts may serve that market better. Undoubtedly quite a few instructors will wish that Garry had rewritten more and cut and pasted less, particularly in Part 3. Others will perhaps miss pet topics and emphases that are now deleted.

HE first printing of this edition contains more than the expected number of minor errors and omissions, especially in the bibliography and author index. For instance, the reviewer quickly found nine names in the author index and text for which no citations appeared in the bibliography. Such defects, some of which will probably be eliminated in subsequent printings, will vex readers; but, on the whole, this considerably renovated textbook preserves most of its forebear's attractive features, some of them even enhanced for beginning graduate courses in 'educational psychology' where human learning is the central theme.



Psychotherapists Are Human, Too

Werner Wolff

Contemporary Psychotherapists Examine Themselves. Springfield, Ill.: Charles C Thomas, 1956. Pp. xvii + 299.

Reviewed by HANS H. STRUPP

Dr. Strupp is a project scientist working on the Psychotherapy Research Project of The George Washington University's School of Medicine, a project directed at assessing the influence of the therapist's training, experience, and theoretical orientation upon his therapeutic techniques. He is a psychologist and a psychotherapist with a considerable history of research activity and a Sullivanian orientation.

"Thich type of psychotherapy do you think is best and why?", "Are you completely satisfied with the theoretical framework of the therapy you use?", "How would you estimate your success with various psychogenic disorders?" These are a few of the 28 questions which Professor Wolff posed to a group of 43 New York psychotherapists, whose responses to a guided interview provide the empirical basis for this exploratory survey. Two-thirds of the book is devoted to edited transcripts of interviews with 22 respondents; the remainder is an attempt at analysis and integration. The product is the 'inside story' of a highly selected group of contemporary psychotherapists-what they do, how they do it, what they advocate and reject. Dr. Wolff holds a mirror up to the therapist and asks him to take a critical look at himself. Needless to say, it makes for fascinating reading.

Dr. Wolff is no newcomer to the field—his publications on psychotherapy date back to 1929, and his ingenious experiments in depth psychology are well known. He is also a courageous man, as this survey attests. He obviously believes that modern psychotherapy is here to stay, but that its shroud of mysticism must be removed before its genuine core can become apparent. I say he is courageous because you do not lightly embark on a piece of research which may falter

because your subjects do not cooperate, and which in addition may inflict scars upon your ego. So, if Dr. Wolff's exploration has shortcomings—I am thinking of his half-hearted attempt at statistical treatment—they must be judged against the totality of his pioneering venture, for here is a veritable gold mine for the would-be researcher.

The list of illustrious therapists includes such names as Clara Thompson, Karen Horney, Sandor Rado-to name but a few. Represented are the Freudians, the neo-Freudians, the Adlerians, the Jungians. There are the views of those who prefix their psychotherapy with brief, group, art, play, and hypno. There are those working in private practice, clinics, and hospitals; with adults, children, neurotics, psychotics. The problem of finding common denominators for comparing and arranging this welter becomes staggering. The author, it seems to this reviewer, adds to the confusion by inventing new labels. For example, who can discriminate "scientific psychotherapy," "analytical psychotherapy," "liberal psychoanalysis," "evolutionary psychotherapy"?

Obviously, the term psychotherapy means different things to different people. The divergences are highlighted and even exaggerated because Dr. Wolff is not presenting a cross-section of American therapists but has deliberately singled out individuals whose very position of leadership, based in many cases on original contributions, sets them apart. They discuss theory and practice in the abstract. What is the relationship between what the therapist says and what he does with a particular patient in a particular situation? We do not know. There are plenty of opinions, many generalities, but few facts.



WERNER WOLFF

Therapeutic concepts are notoriously broad, ambiguous, and flexible. One respondent was reminded of Goethe's memorable passage from Faust ("Where concepts are lacking, a term arrives at the right time "), which could have been written with modern psychotherapy in mind. Another considered the question about the best type of psychotherapy analogous to saying "Which type of surgical operation is best?" Terms like transference and resistance have different core meanings to different therapists. So does the old stand-by, directive vs. nondirective therapy. No "client-centered" therapist is included. There seemed to be a growing conviction that a certain amount of directiveness in an educational sense is desirable and even necessary.

ow successful are these respondents as therapists? Around this question heated battles are still raging, and critics like Eysenck will not be satisfied with the answers given here. They are the usual estimates, subjective, tentative, and mostly without follow-up. Dr. Wolff concludes correctly that we lack the fundamental knowledge on which to base criteria for evaluation. On this point, therapists, critics, and researchers will register unanimous agreement.

One of the useful functions this survey performs is that it reveals the therapist as an individual. Some are dogmatic; some are humble; all of them are human beings who try, earnestly and devotedly, to mitigate emotional suffering and to help people become more productive. In this light, techniques and theories pale. As one eminent therapist puts it:

In my opinion, specific techniques and theories are not nearly so important... as the individual who administers treatment. Psychotherapy consists of an interpersonal relationship, and emotional growth proceeds in the medium of this relationship. The therapist who has a genuine respect for his patient, who empathizes with him, and who understands how to manipulate an interpersonal relationship toward therapeutic objectives usually succeeds irrespective of the specific label attached to his therapy.... [Therapists] seem to do well or poorly because of subtle personality factors rather than because of their particular orientation (pp. 109–110).

Does it appear that present-day psy-

chotherapy is not much of a science, by usual standards? I am afraid so. Does it prove that psychotherapy cannot become a science, that it is useless as a therapeutic tool, that we do not know how to help people with their emotional difficulties? No, most emphatically, no. There are hopeful signs that sectarianism and mystique are on the wane, that therapists expect much from research, that there is greater openmindedness and greater tolerance of opposing points of view.

But, as Hilgard (Psychoanalysis as Science) suggested in a symposium a few years ago, the task of making a science out of psychotherapy may fall to others than the therapists themselves. thorne studies, occupies the social section. With such a formidable array of topics in such a small space (300 pages) the result, of course, is inevitable. Virtually every treatment is sketchy and the book impresses one as being the slight expansion of an outline—a skeleton, as it were, with only shreds of flesh, few viscera, and not much skin to hold it all together.

Nevertheless, in spite of the extreme brevity of the treatment of the topics, a striking amount of information is conveyed to the reader in a style which, while somewhat pedestrian, is clear and intelligible. Some of the material-for example, that in social psychology on organization and working groups-is quite good and provides quick, if not deep, acquaintance with some fundamental ideas in those areas. In fact, the total number of ideas in the book is quite considerable. Unfortunately the book is weak in illustrative materials, either by way of the citation of examples of industrial practice or in the citation of research results (English or American). There is little to provide the reader with the feeling that industrial and social psychology are live and active scientific fields. It is also to be regretted that there are no lists of reference readings in any useful quantity.

The book should not be viewed as an example of literature in industrial and social psychology in England because the author makes no systematic effort to examine English practice or English research in these areas. As an example of English views of what should be known about psychology by persons training for management in England, the book tells us something. If the author indeed did implement the recommendations of the Committee on Education for Management, then this book is evidence that management training in England takes a broad view of psychology and that the English are being serious in their attempt to provide the management student with breadth of knowledge in psychology as a basic part of "the art and science of handling men."

Psychology's Panorama for Students of Management

John Munro Fraser

Psychology: General, Industrial, Social. New York: Philosophical Library, 1956. Pp. x + 310, \$7.50.

Reviewed by HOWARD G. MILLER

Dr. Miller is Professor of Psychology in the North Carolina State College at Raleigh. He is primarily an industrial psychologist who is set to make psychology contribute effectively through teaching and research to the industrial development of the southeastern United States. He says he is concerned with research on organization, on academic and industrial selection, on performance measurement, and on the personal characteristics of different occupational groups.

In the preface to this book the author says that in 1947 the Committee on Education for Management in England recommended that psychology be included in the training of management students as a background subject. The aim was "to give students some training in the art and science of handling men." The course was "to provide an introduction to general psychology and to illustrate its application in dealing with the human problems of industry and commerce and the management of social

groups." This book was written to fulfill these requirements. The author is eminently qualified to perform this task. He is a senior lecturer in Human Relations at the College of Technology in Birmingham, England, and he spent several years on the scientific staff of the National Institute of Industrial Psychology.

The book, as might be expected, contains three main parts: one on general psychology, one on industrial psychology, and one on social psychology. Each part attempts to provide fairly complete coverage in its area. As a result the number of topics dealt with is almost unbelievably large. The topics range from sensory psychology through perception, learning, motivation, and abnormal psychology in the general section; virtually all the topics covered in American texts on industrial psychology appear in the industrial section; and a fairly complete package on what might be called industrial social psychology including leadership, organization, morale, attitudes, and the ubiquitous description of the Haw-

English scholarship does not seem scholarly-but it is.

-EUGENE P. CHASE



Psychotherapy in the Classroom?

Rudolf Dreikurs

Psychology in the Classroom: A Manual for Teachers. New York: Harper & Brothers, 1957. Pp. xvi + 237. \$3.75.

Reviewed by FRANK S. FREEMAN

Dr. Freeman is Professor of Psychology and Education at Cornell University where he has been on the faculty many years. He has published in educational and developmental psychology, clinical psychology, psychological testing, and the psychology of individual differences. His most recent book is a revision of his Theory and Practice of Psychological Testing, recently reviewed in this journal (CP, 1956, 1, 17f.).

THE author of this volume, a professor of psychiatry in the Chicago Medical School, has conducted classes primarily for teachers, for the purpose of providing them with theoretical concepts and specific skills intended to enable them to deal effectively and constructively-that is to say, therapeutically- with children who are difficult problems in the classroom. Many of these children, if sufficient professional personnel were available, would be referred to a psychologist or a psychiatrist for treatment. Since enough professional psychotherapists are never available. Dreikurs maintains it is the responsibility of teachers to "prevent and correct maladjustments" of their pupils. Teachers, therefore, must have instruction in and information about "new psychological methods for the classroom" as part of their professional preparation.

It is unfortunately true that a sufficient number of psychologists and psychiatrists are not available to schools and to parents; so from this point of view Dreikurs' position is warranted. On the other hand, assuming they are qualified to handle difficult behavioral problems, there is no doubt that, when teachers attempt to become therapists or counselors to a few children in the classroom, they are unable to devote their full energies and teaching skills to the remaining, large majority of their pupils. Then,

some persons will contend, the primary purposes for which the schools presumably exist—namely, instruction in subject-matter and the development of mental abilities—will suffer.

Dreikurs and some others, on the contrary, will answer that it is the responsibility of the school to educate 'the whole child.' In fact, Dreikurs states that his educational philosophy "is based on the philosophy of domocracy with its implied principle of human equality, and on the socio-teleological approach of the psychology of Alfred Adler. In this frame of reference, man is recognized as a social being, his actions as purposive and directed toward a goal, his personality a unique and indivisible entity."

Without wishing to detract from Adlerian principles, I would point out that the principle expressed in the foregoing quotation is not unique to Adler's individual psychology. It is an essential of the philosophy of 'progressive education,' dating back well into the nineteenth century. So far as purposiveness in behavior is concerned, we know that, among the great twentieth-century psychologists, William McDougall developed his system of 'purposive psychology' shortly after the turn of the century. And so far as 'holism' is concerned, there is the work of Kurt Lewin and others, comparable though stated differently.

What is significant about this book is the author's successful effort to bring the 'purposive' and 'holistic' principles to bear upon the handling of children in the classroom. He does so, first, through a clear and relatively simple presentation of psychological concepts—at times too little qualified or too much oversimplified, as, for example, when he states: "the similarity of character traits in brothers and sisters is an expression of the family atmosphere, while differences in personalities of siblings reflect the particular

position of each child in the so-called family constellation." Or: "Reward and punishment as corrective influences are outdated today."

Dreikurs devotes about three-fourths of his book to "practical applications," consisting of numerous case examples, presented by teacher-students, with more or less detailed comments by the author upon the basic behavioral and personality problems involved and upon the soundness of the teacher's procedures in each instance. This, I believe, is the most valuable part of the volume and should be of considerable value to teachers, even though one may not always agree with the author's theoretical position.

The author's comments on cases and his interpretations of the behavior dynamics involved are determined, of course, by his Adlerian orientation, in the course of which he offers advice to teachers regarding a variety of problems in classroom procedure. These cases, the comments, and the interpretations can serve as very good teaching materials for both the instructors who agree with Dreikurs and for those who, disagreeing, will want to substitute their own comments and interpretations.

We would all grant, I believe, that teachers should be well informed regarding the nature and origins of human behavior, for thereby they become more perceptive of the significance of their pupils' actions; and the likelihood is that teachers will, as a consequence, become more sympathetic, or even 'empathic.' We may have to grant, also, that under prevailing conditions in our schools and communities, it is necessary for teachers, in addition to their already heavy load of responsibilities, to apply considerable psychological knowledge and skill in the classroom in the handling of children who present difficult behavioral or personality problems. In that event, teachers should have much more thorough preparation in psychology than they now have. For this purpose, Dreikurs' book should be very useful. Its value would have been considerably enhanced, however, if Dreikurs had included references to other publications to which the student could turn, for there is in the whole volume only one reference to a specific publication by another author-a deficiency easily remedied by any instructor who chooses to use this book with his students.

CP SPEAKS...

RITICISM! CP deals in criticism. It tries hard to pick reviewers who are competent to criticize, to make value judgments, favorable or unfavorable, and then it asks the reviewers to set these values-their own evaluative reactions to the book reviewed-down in words. It tells the reviewers not merely to abstract the book but to indicate the nature of its contents as they assess it, a more difficult job than abstracting but one that CP's reviewers have been managing pretty well. To this extent, then, CP is a journal of criticism and thus a journal of opinion. And CP thinks that its readers like this fare.

Criticism, opinion, are, however, necessarily idiosyncratic. The reviewer may endeavor in accordance with CP's instructions not to dissent from the author's choice of goals but to assess his book in respect of the degree in which it has attained its author's intention, and still the criticism remains personal and individual. Another reviewer, equally competent, might have thought differently. And so well hidden are the springs of each man's values that no one could have predicted the difference in appraisal until the reviews emerged from the reviewers' typewriters, powered as good typewriters always are by the unconsciousnesses of their owners.

CP thought to look into this matter of criticism a little and went to the library. Several shelves of books there, having to do with literature, esthetics and taste. Criticism is an art in literature. It paints a picture and asks the question: Is this true-true to you? Or else: Do you find pleasure in seeing the book from this point of view? CP found no hint of literary criticism's having to be just, and even objectivity, when applied to taste, does not imply social agreement. And how primitive eighteenth-century criticism was! You, the reviewer, let out all your spite on the author and he sought a proper redress: he caught you in your favorite coffee house and gave you a caning. Should CP stock canes for authors, or is there a better procedure?

For CP there is, indeed, a better way. It needs no canes—because the twentieth century is more grown-up than the eighteenth—because psychologists, although not immune to regression, understand the springs of their own actions somewhat better than either the ancient or the contemporary humanists—because scientific criticism differs from literary and esthetic criticism. It is infected with the scientific desire to be right, to tell the truth as nearly as possible, no matter how unattainable absolute truth may be shown to be.

Recently Joseph Gallant, in CP's big sister magazine, Science (29 April 1957, 787-791), has shown in a fascinating article how scientific writing became separated from literature in the middle nineteenth century. Not only were Pliny's Historia naturalis and Lucretius' poem De rerum natura literature, but Robert Boyle's and Isaac Newton's contributions to natural philosophy were as much literature as was other philosophical writing. Gallant remarks that, "as the various sciences and disciplines matured, their subject matter became ever less speculative and philosophic, ever less the projection of personal sensitivity and insight." It became more technical, systematic, mathematical, and experimental. By comparison the earlier analyses were "personal and imaginative." So science left literature, and Gallant finds William James as one of the last authors whose scientific publication might still be regarded as literature, too personal and sensitive to endure the scientific strait jacket.

It is clear that nowadays the review of scientific writing shares the goal of science in aiming at objectivity. It would like to be true. At any rate it would like to be correct, to say if-a-then-b, letting error, if there be any, rest in the choice of a. But error there will be. Scientific activity—setting problems, doing experiments, writing books, assessing them—is full of

values, and values are personal whatever be the effort to make them generic. The review of scientific writing, if it be critical, will inevitably be idiosyncratic, though much less so than the frankly personalized reaction of literary criticism.

So what does *CP* do? Is it doomed to remain only a journal of opinion, or is there some way by which it can better contribute to nomothesis, if not to truth?

Everybody says at this point: Have double reviews. If there are really both black and white balls in the urn and you pulled a black one out first, draw again to get a white. That is not very good statistical thinking. If you get two blacks, CP is going to have to print two reviews that are mutually redundant, not only as to their report on the contents of the book, but also as to their assessment. Well, CP is doing just that for a few important books and it will continue, in spite of the redundancy that turns up. But it cannot extend this multiplication. which does not achieve justice. If the black and white balls, the possible unfavorable and favorable reviews by competent reviewers, are equal, then a second review provides only one chance in two of correcting the first. That is not good economy of space.

Ideally, if *CP* draws a black first, it ought then to look in the urn and, if there are many more white balls than black, pull out a white and use it. But it cannot see in the urn. What other method is there?

FEEDBACK. Governance. Cybernetics. Let CP do its best to get a competent reviewer. Then let it publish what he sends in. CP does not know whether the review is fair, unfair, or the reflection of one of many possible personal sensitivities. The published review is now an item in the body scientific. Does it need correction? Let him who thinks it does say so and say why. CP has ON THE OTHER HAND for mature, impersonal discussion of the value-judgments of books. This department of letters has not yet been used adequately for this purpose. It should be. CP begs its readers to mend their habits, to bury their diffidences, to forget modesty in the interests of fair play and help CP and Psychology to get clearer the picture of what is going on. CP has a deep faith that criticism of criticism, and criticism of criticism of criticism, will inevitably diminish the Spielraum and narrow the variance about whatever would be the absolute verdict, were universal agreement induced by infinite discussion.

Are you an offended author who feels that he has not been fairly treated or correctly understood? Bury your pride as well as your emotions and say objectively what is wrong in the review. What you say is idiosyncratic. So was the review. It is much better to get competent understanding into the open than to let clear thinking be cut off by personal modesty or pique. Do not complain about the reviewer, of course; he is irrelevant. Talk about the content of the book and of the review. Be adult, impersonal, informative, and interesting, and you will have done science a service.

Are you a reader who disapproves a review, either because you know the book reviewed or because you perceive defects in the review itself? Then say so to CP. Let there be this negative feedback that governs the total discussion as it moves a little of the way toward justice. Are you convinced that the review was too favorable? Say so then to CP. Here is an abuse that needs correcting. Do not blame the reviewer or the reviewed. Be dignified and clear. If you have it in you to be buoyant and humorous, by all means let yourself go, relieving the tensions that mere dissent creates. Do you think a review unfair? Say so. It does not matter whether you are a friend of the author or of the reviewer or whether you are a xenanthrope who never heard of either of them but are moved to correct a wrong by your personal need for honesty and clarity. Write CP. The proper use of ON THE OTHER HAND must somehow be induced. Will you let your pride and personal whim block the advance of honest science?

So that is that. CP's department of letters, ON THE OTHER HAND, exists primarily for mature discussion of books and of the reviews of the books. CP begs its readers now to transform this department into an area of wise dissent. Only in that way can we make maximal progress. Well?

-E. G. В.

DR. HENRY A. MURRAY says:

psychology of personality

SIX MODERN APPROACHES

"... is an intellectual feast ... The reflections of these authors are at the frontier of contemporary thought."

-CONTENTS-

Introduction J. L. McCARY, Editor

Psychoanalytic Theory of Personality: Notes Toward A

Systematic Textbook of Psychoanalysis Leopold Bellak

Personality and Motivation Theory Based on Structural

Measurement RAYMOND B. CATTELL

Perception, Motives and Personality: A Clinical Perspective GEORGE S. KLEIN

The Cross-Cultural Approach to the Study of Personality

MARGARET MEAD

The Approach of the Authoritarian Personality NEVITT SANFORD Personality: An Integrative View DAVID C. MCCLELLAND

Pp. xvi + 383, bound in buckram \$6.75

Write for Your Examination Copy

LOGOS PRESS, INC., Box 273, Cooper Station, N. Y. 3, N. Y.

Important Forthcoming Logos Publications

THE RORSCHACH AND THE EPILEPTIC PERSONALITY By J. Delay, P. Pichot, T. Lemperiere & J. Perse English translation edited by Arthur L. Benton

CONTEMPORARY EUROPEAN PSYCHOLOGY CONTEMPORARY EUROPEAN PSYCHIATRY

In these two volumes eminent authorities from each country report on current psychology and psychiatry in Austria, England, France, Germany, Italy, the Lowlands, Scandinavia, the Soviet Union and Switzerland.

Psychology's Sills and Lintels

Herbert Feigl and Michael Scriven (Eds.)

The Foundations of Science and the Concepts of Psychology and Psychoanalysis. (Minnesota Studies in the Philosophy of Science, Vol. I.) Minneapolis: University of Minnesota Press, 1956. Pp. xiv + 346. \$5.00.

Reviewed by BRADLEY REYNOLDS

Dr. Reynolds, an intellectual son of Spence and grandson of Hull, is a psychologist primarily involved in the theory and experimental psychology of learning, "a classical, naive, brute-force Hullian," he says of himself. He writes papers on motivation, reward, stimulus-trace, and all that sort of stuff, while, presumably for the time being, he shows the Air Force how to make systems analysis at the Air Force Personnel and Training Research Center, Air Research and Development Command.

It may be perhaps more a reflection of insularity than a realistic evaluation of the state of all the world, yet it seems that psychologists for quite a long time now have spent more time and words on methodological issues than most other scientists, and, it might be argued, with less reason and little profit.

Perhaps this has been so because in this way the psychologist can be a philosopher—of science, of course—and a metaphysician—committed, of course, to an antimetaphysical metaphysic. The psychologist, only recently separated from his philosophical parent, may seek in the philosophy of science that comfort which the liberated son of a hard-shell Baptist father may hope to attain from attendance at the Unitarian church.

It seems more likely, however, that psychologists' lively interest in the methodology of science has been sustained by practical and economic rather than philosophical needs. Much of what is most viable in modern psychology—e.g., the psychology of learning, psychological testing, clinical psychology—is of pedagogical origin and intent. It aims at the prediction and control of quite complex behavior in quite practical and everyday circumstances.

These are ambitious aims and many psychologists have been of the opinion they are not realizable without the support of a body of basic laws and general theories of behavior. No small number of these men, their need heightened perhaps by some uneasiness about the health of the psychological enterprise in the theory-and-law division, have had recourse to the philosophy of science, not only for comfort and license, but for guidance and enlightenment as well. Theoretically oriented psychologists may find a little of these rewards in this volume of papers from the Minnesota Center for Philosophy of Science, but certainly all will find parts of it enlightening at least and even entertain-

HE psychologist reader will find some other features of the volume disappointing and annoying. First, he will find that something between a third and a fourth of the book is reprinted material. There is some justification for this in the case of an essay by Feigl which has been published in Proceedings of the Second International Congress of the International Union for the Philosophy of Science, a source not readily available to many psychologists, and it appears, moreover, in a revised and expanded form. The justification is not as apparent in the case of essays by Cronbach and Meehl, and by Meehl which have appeared in the Psychological Bulletin and the American Psychologist, and by Skinner, which appeared first in The Scientific Monthly.

The Skinner essay on psychoanalytic concepts is included because Scriven jumps off from and on it in his major

contribution. It seems more than likely, however, that anyone interested enough in Scriven's arguments to hear him out will be familiar with Skinner's strictures on theorizing. He is less likely to be familiar with general behavior-systems theory which furnishes the text for Buck's essay, and this is presented without a companion piece by Miller.

Secondly, the reader will find a grabbag of essays over a wide range of topics and without the integration and organization, as the title of the book might have led him to expect. There are essays on the foundations of science—i.e., the philosophy of science of logical empiricism and essays on the concepts of psychology, and essays on the concepts of psychoanalysis, and more besides. There is a common core of opinion to be found in certain of the papers but a common core of opinion is only compatible with a common structure and not necessarily productive of it.

The impression is inescapable that what the editors have done is to gather up the most comely of the community's products and put them between hard covers. This is not to say the products are not worth a permanent package. Many of them are. But they are not a set.

The general reader probably will find the group of papers on psychoanalysis of more immediate interest, and of these the paper by Ellis is outstanding. It is a courageous effort. He attempts an operational reformulation of some of the basic principles of psychoanalysis. He says that his reformulations are operational, "in that they are solidly anchored to observable events, or things." An example:

Oral eroticism. Freud: "The baby's obstinate persistence in sucking gives evidence at an early stage of a need for satisfaction which, although it originates from and is stimulated by the taking of nourishment, nevertheless seeks to obtain pleasure independently of nourishment and for that reason may and should be described as 'sexual.'"

Operational reformulation: Babies, through their oral perceptions, appear to obtain satisfaction independently of nourishment. We may describe this tendency of infants to seek oral stimulation as oral sensuality and may find confirmation of it through observing the behavior of infants in relation to their oral zones.

It is not clear how the second formulation is more operational than the first in the sense that Ellis intends. Nor is it easy to convince one's self that he has succeeded at all in doing what he set out to do. At least one reader, convinced he has not, nevertheless commends the try.

PAPERS by Feigl and Carnap will prove most interesting to the psychologist in terms of what they reveal with respect to the features of current logical empiricism, for the features have been changing.

Carnap admits that perhaps the narrow limitations imposed by the earlier formulations of the logical empiricists have led some psychologists to be too narrowly restrictive in the formation of their concepts. For this reason he feels the empiricists must be constrained to emphasize the changed conceptions which give more freedom. The psychologist, in his turn, may decide he has been backing the wrong horse and look up a new tout. Or swear off entirely.

In their preface the editors state that the reader will have to judge for himself whether these essays contribute to clarification of theoretical issues and to research in psychology. The reviewer, having read the book, does not find it easy to make judgment. If he were forced to it—as a reviewer presumably is—he would have to say that he does not think they do.

Habit-Centered Adjustment

Harold W. Bernard

Toward Better Personal Adjustment. (2nd ed.) New York: McGraw-Hill, 1957. Pp. vii + 454. \$5.50.

Reviewed by WILLIAM W. WATTENBERG

Dr. Wattenberg is Professor of Educational Psychology at Wayne State University in Detroit. He has long been concerned with psychological problems that are related to mental hygiene and his research is directed upon delinquency and school problems. He is also with Fritz Redl the author of a book called Mental Hygiene in Teaching.

A THOROUGH 1957 revision of a textbook on adjustment, first published in 1951, this volume by Harold Bernard, who is also author of a widely used and interestingly arranged book on mental hygiene for classroom teachers, raises many questions as to purposes and procedures to be followed in courses aimed at helping college students with their personal problems.

Bernard makes his aim very clear. The book is designed to be of service directly to undergraduates. It is not written to provide advanced training in psychology for teachers, for counselors, for clinical psychologists, for social workers, or for psychiatrists, in which case the goal would be that of providing intellectual tools for diagnosis, therapy, or other remedial action.

The basic psychological system in terms of which advice is given has also been clearly defined. Bernard holds the position that behavior is largely determined by habits and attitudes. At one point, for example, he describes the manic-depressive as "a person characterized by the habit of going to emotional extremes." Hence to achieve better adjustment the student must recognize his bad habits, or attitudes that could cause maladjustment and set out to replace them with good habits or attitudes. In areas of living where no bad habits or attitudes have yet appeared, the task is the more simple one of establishing good habits and evoking good attitudes. The author takes the position that the volitional control of habit and attitude formation is usually possible, and he makes detailed suggestions at many points as to how this end can be accom-

Armed with these devices, Bernard deals with many of the problems that are worrisome to college undergraduates and to most young adults. His range is great—from sleep habits to religion, from

efficient study to marriage, from vocational adjustment to psychological satisfactions.

An interesting change in tone occurs within the book, one that will complicate its use by instructors. In the first section, when he is setting forth basic principles, Bernard writes in a hortatory style quite similar to that of the Overstreets. At only one point, in a discussion of sleep, is the student permitted to learn that there are different schools of thought. Then, when he takes up specific areas of adjustment, at the very point where another author might be tempted to turn dogmatic, Bernard becomes more cautious and eclectic. For instance, in the early sections of the text the impression is created that habits can be willed into being or can be destroyed cognitively. Later, in an unusual chapter, Bernard deals with the factors of mental health that are beyond individual control. It is almost as though, having determined at first to emulate Dale Carnegie, midway through the project his habits as a scientifically trained psychologist got the better of him.

Even when his point of view differs, Bernard finds an opportunity to familiarize his readers with ideas drawn from most of the major writers, with the interesting exception of Carl Rogers. This omission may be due to the goal of the book, but it also fits in well with its general tone. Symbolic is the fact that chapters do not close with questions to be discussed but with true-false exercises, labeled "Test Your Comprehension of the Chapter."

This text will be welcomed by instructors teaching freshmen-level courses in personal efficiency, personal problems, or orientation, courses open to students who have had no previous course in psychology, especially in institutions where it is important to reinforce the conventional attitudes toward ambition, morality, and liberal religious belief. On the other hand, the book could hardly be satisfactory to an instructor who wished to base his course on unconscious motivation or on ideas derived from psychoanalysis or client-centered therapy.

Ethics from Neurones

C. Judson Herrick

The Evolution of Human Nature. University of Texas Press, 1956. Pp. x + 506. \$7.50.

Reviewed by JAMES J. JENKINS

who is Associate Professor of Psychology at the University of Minnesota. He calls himself a stimulus-response psychologist and an 'hereditarian,' attributes which are apparent in the review. His special concerns are psycholinguistics and the psychology of individual differences, not, of course, ethics.

VIRTUALLY every phase of Herrick's rich and productive professional life is represented in this book. It is a compendium of his more than sixty years of research in neurology and biology and his continuing concerns with evolution, comparative neurology, determinism, freedom, humanism, democracy, ethics, morals, values, awareness and "mind."

It is a book of broad and up-to-date scholarship, studded with quotable quotes, packed with data and information and seasoned with wisdom.

The explicit purposes of the book are (1) to examine the objective and subjective components of experience, (2) to search for biological principles of human conduct, and (3) to study the evolutionary history of man from a biological point of view—all for the specific end of understanding human nature and discovering how to control behavior for our own good.

Herrick believes that mankind is in a sorry state and must shortly and deliberately do something about it or destroy itself. Thus he proposes the foregoing examination, search, and study as the way for revealing just what it is that we ought to do. In the pursuit of this endeavor he presents a stimulating discourse on 'psychobiology,' but his discourse seems to this reviewer to have only a tangential relationship to his initial purposes. The relations of men's problems and conduct to the evolution of the nervous system are never established.

If, on the other hand, the purpose of the book be inferred from its contents, then there appear to be two major aims: (1) presenting a humanist ethic and (2) delineating systematic thought on psychobiology as formulated by C. L. Herrick (his admired brother), C. J. Herrick (himself), and G. E. Coghill (remember individuation?). These two aims are jointly associated only aperiodically and mostly by simple spatial contiguity.

The ethics appear to this reviewer to be conventional humanism. They remain unsupported, except by the remote argument that if people do not behave better, they will destroy themselves (which would be unbiological). They ought to do better. This reviewer is heartily in sympathy with Herrick's biases and emotions, but he feels that the principles are not derived from or substantiated by the biological science invoked for these purposes.

The psychobiology is much easier to read, much more stimulating and more appropriate to the title of the book. These sections, dealing with Herrick's specialty, are admirably calculated to intrigue, excite and inform senior or graduate students in the social and biological sciences. Here there is imagination and perspective in the relating of neurological, psychological, and social components of behavior.

Psychologists may find this a difficult book to read. Familiar terms appear with unfamiliar meanings and some terms seem to shift their meanings with respect to discriminations psychologists are likely to make. Consider, for example, the various meanings and uses of the word values. "They are the ends towards which successful behavior is directed" (p. 136). "Human motives generally stem from values" (p. 136). "Values

motivate conduct" (p. 137). "Value resides in the satisfaction of the craving" (p. 136). "They reside... in the relation existing between the thing sought and the satisfaction it gives" (p. 138). "Value is defined as the relation existing between an interest, desire, or need and the thing which satisfies the craving" (p. 156). "A satisfaction is a value" (p. 304). "The basic value is life itself" (p. 146). "Personal profit of some kind is the basic biological value" (p. 152).

Then there are teleological-sounding sentences which disturb this reviewer, sentences which are, nevertheless, common enough in this literature. Here is an example: "Because sensorimotor experience is concerned primarily with the adjustments of the body and its movements with reference to external things which are oriented in space and time, the organs concerned are also precisely localized in the brain" (p. 243).

The reviewer also thinks that analysis has not gone far enough. Always it is the concern of the moment that seems to be the central issue. In one chapter we are in peril "just because" of X. In the next our difficulties are seen as "the results" of Y. Our "only" remedy in one place is A; but in the succeeding chapter the "cardinal factor" in the solution is B.

The book requires and will repay careful, critical reading. Nevertheless the science of psychobiology is still in its fetal stage. Herrick himself characterized his systematization of Coghill's philosophical thoughts on psychobiology by saying, "We were both groping in the dark for principles whose exact significance eluded us." Psychologists and biologists should be glad that Dr. Herrick, now in his eighty-ninth year, has prepared for us this broad outline of his psychobiological philosophy.



The activity of these people interested me only as an illustration of the law of predetermination which in my opinion guides history, and of that psychological law which compels a man who commits actions under the greatest compulsion, to supply in his imagination a whole series of retrospective reflections to prove his freedom to himself.

-LEO TOLSTOI



Raw Data for the Culturally Hungry

Bert Kaplan (Ed.)

Microcard Publications of Primary Records in Culture and Personality. Vol. I. Madison, Wisc. (Box 2145): The Microcard Foundation, 1957. 130 Microcards. \$35.00.

Reviewed by ALEX INKELES

Dr. Inkeles is a Lecturer on Sociology and a Senior Fellow in the Russian Research Center at Harvard University. He is a Russian expert, with a whole book and a collaborative other book on the Soviets in the background, and he is primarily interested in comparison of social systems and in the relation of personality to the systems. He began in sociology and anthropology, moved on through social psychology to some psychiatric training, and now finds himself involved with problems of national character and where it comes from. See the comment on this project for publishing raw data in CP SPEAKS ... of the July issue.

THE Committee on Primary Records, established within the Division of Anthropology and Psychology of the National Academy of Sciences-National Research Council, presents us with the first in a series of microcard 'volumes' in which the protocols of projective and other personality tests and biographical materials will be reproduced in raw form. Ninety persons have already consented to make available their unpublished and often unanalyzed records. Apparently the initial efforts will be mainly devoted to getting out materials on "non-Western" and indeed predominantly "nonliterate" peoples, although the project, if successful, can and will be extended to include other groups. This first volume comes to us not only with a preface by the Chairman, A. Irving Hallowell, but with special blessings (in the form of a pair of forewords) from A. L. Kroeber and Gardner Murphy. Although the publication may not be quite the "event of major importance" which Gardner Murphy and A. I. Hallowell feel it to be,

it certainly is a useful move which fills a need many have long felt.

The first volume contains twenty-five items, each introduced by a brief note from the field worker indicating the conditions and problems faced in gathering the data. There is apparently no system governing the content of any particular volume, except perhaps the order in which the field workers were willing and able to make their materials available. Thus, the Ojibwa (a life history, two different sets of children's TATs, and one set of Rorschachs), some Nepalese (Rorschachs), Cree (Draw-a-Person Test) and Haitian (Rorschachs) are all made to live together in the happy hunting ground the Committee has here created for eager researchers. As an aid to identification, each culture has been listed according to the classification used by Murdock in his Outline of World Cultures. By this count 19 different cultures are represented in the first volume, including six from Asia and ten American Indian groups. In some cases a battery of tests was used and all are reported, but most often the field workers seem to have been able to manage to use but a single instrument. For all the cultures there are twelve sets of Rorschachs, seven of TATs, six biographies and autobiographies, two Sentence-Completion tests, and two Drawa-Person tests. The size of the sample ranges from 1 (Pathon life history) to 115 (Ute Rorschachs). Sets of records dealing with children are more numerous than those yielded by adults.

Social scientists, being intellectually arrivistes, cling desperately to the

shreds of respectability they think they have won. The wearing of a grim visage of rigorous empiricism and much beating of a drum called 'theory' are part of their role. The ritual developed to maintain the appropriate image includes the slaughter of sacrificial lambs. To many this project will seem an appropriate victim. Certainly the materials here collected do not leave one feeling that anthropologists (and psychologists) have too well understood why they wanted psychological test material or what systematic role it should play in the analysis of a culture or in the study of a field problem. As the editor of CP has properly warned us, over all the years since his time Bacon's "masses of data" have sat patiently and uselessly "waiting for induction to operate upon them." It is equally necessary, however, to call attention to the masses of theory, also waiting patiently and uselessly, for data to test them. The important thing about these sometimes blind efforts is that now collected and disseminated they provide essential raw material for a variety of scientists who need and want it. Admittedly the data are inferior to what might be collected in a planned systematic study, but the truth of the matter is that it is most unlikely that these materials would ever have been collected by many of the people who will work on them now that they are available.

The value of the 'primary records' as an aid in training students in the use and meaning of the tests would alone justify the venture. Those working with and trying better to grasp the powers and limits of their testing instrument can also make use of these materials. Indeed, the editor apparently has already begun an interesting study of one dimension of the Rorschach on the basis of them. Those concerned with discovering the constant elements and in mapping the variability of human personality now will begin to have a substantially broadened base on which to establish their study. But the publication of these materials will probably be of greatest importance for those seeking to put the crucial problems of so-called culture and personality study on a firmer footing. The heart of scientific work lies in the possibility of repeating observations and replicating experiments. Such efforts are patently impossible for anyone working in the field of culture and personality. The preparation of this set of primary records, which anyone can now score or re-score to suit any analytic scheme, holds open real promise for the systematic testing of hypotheses. It opens up great possibilities in the use of psychological records concurrently with ratings on sociocultural patterns based on the materials in the Yale cross-cultural files. No scoring will, of course, compensate for deficiencies in the size of the samples, or of the suitability of the instruments, but to a hungry man, a crumb is welcome. And this is no crumb. Indeed it may prove to be a good baker's dozen.

Banner with a Strange Device: -p log₂p

Colin Cherry (Ed.)

Information Theory: Third London Symposium, 1955. New York: Academic Press, 1956. Pp. xii + 401. \$11.50.

Reviewed by FREDERICK C. FRICK

who is Group Leader of twenty experimental psychologists in the Massachusetts Institute of Technology's Lincoln Laboratory. They work on basic research in the processing of human data and in problems of air defense. Dr. Frick thinks he is one of the first psychologists to climb on information theory's band wagon and that he may be one of the first to disembark. He made up the title of the review. —p log2p is to information theory what the sum of the squares is to analysis of variance; it's the amount of information you can expect from an event of probability p.

In 1948, Norbert Wiener published a plea and an outline for a new science to be erected in "the no-man's land between established fields." Information theory was offered as a potential lingua Franca for this particular interdisciplinary effort, and the Zeitgeist was agreeable. With astonishing rapidity a group of communication engineers, physicists, mathematicians, physiologists, psychologists, and linguists discovered a mutual interest in the ways in which men collect,

classify, convert, and transmit information. The London Symposia, which can now be regarded as biannual events, serve as one of the rallying points for this group, and the present volume presents the papers—and some of the discussion given at the third such symposium, held in September 1955.

THE proceedings of the first two symposia are also available and it is interesting to do a little cross-comparing. The number of attendees has grown from slightly over 100 to some 250. Where eight countries were represented in 1950, 15 (including the U.S.S.R.) are represented in 1955. Twenty papers were presented at the first meeting; 40 were given at the last meeting. The group appears to be viable. On the other hand, of the 20 papers in the first proceedings all but two can be traced quite directly to the stimulus of information theory and the statistical theory of communication. The papers in the present volume do not display their common parentage so obviously-if, indeed, there is any.

Certainly Licklider's extremely fine discussion of the "missing fundamental" and the problems that this creates for a simple place theory of hearing owes nothing to Shannon, Wiener, or modern communication theory. The same thing can be said of a substantial number of other papers, including Brown's argumentative discussion of random sequences, Allanson and Whitfield's investigations and speculations on the function of the cochlear nucleus, the several papers on mechanical translation and information retrieval, etc., etc. In short, information theory and signal analysis, which make up modern communication theory, do not occupy the center of attention in the 1955 Symposium. Nor do they supply a unifying methodology or terminology. as Professor Jackson suggested they might in his Opening Address to the Second Symposium. It is, in fact, increasingly difficult to predict just what will be discussed in the extremely diverse group that currently rallies around the banner of information theory.

This indefiniteness is not necessarily a bad thing. It does, however, give the present volume something of the flavor of a full meeting of the American Association for the Advancement of Science. There are a number of papers which will be incomprehensible or uninteresting to psychologists. This reviewer would put about one-fourth of the volume in this class. Of the remaining, eight might very well have appeared in one of the American Psychological Association's journals. They range from Farquharson's intriguing game-theoretic analysis of voting behavior, to a straightforward experimental study on the effect of context on heard speech (D. J. Bruce). In between, there is Quastler's excellent summary of the work on human channel capacityone of the few papers involving the application of information theory-and North's discussion of the human operator in which he is able, by devious associations, which lost this reviewer, to package game-theory, decision theory, servotheory and the Estes and Bush-Mosteller learning models into sixteen pages.

The remaining papers will appeal differently to different people. There are two quite extensive discussions of the functioning and simulation of neural nets. There are papers on the statistics of language and there are papers on information retrieval, which is a field that psychologists might do well to find out more about. Certainly, the strategies employed by the librarian appear to be more than casually related to Bruner's "strategies of concept attainment."

In short, almost anyone should find something stimulating in this volume. It would, however, be a courageous reviewer who attempted, on the basis of these proceedings, to assess just how far the pipings of Dr. Shannon's flute have led us in the past few years.

W

Mathematics is the most exact science, and its conclusions are capable of absolute proof. But this is so only because mathematics does not attempt to draw conclusions. All mathematical truths are relative, conditional.

-CHARLES PROTEUS STEINMETZ

Five Arrows Shot into the Air

Foundation for Research on Human Behavior

Leadership Patterns and Organizational Effectiveness;

Planning and Training for Effective Leadership;

Training in Human Relations;

Psychological Surveys in Business Forecasting;

Training Foreign Nationals in the United States. (Reports of seminars conducted by The Foundation for Research on Human Behavior in 1954–55.) Ann Arbor, Mich.: Foundation for Research on Human Behavior. \$1.00 each.

Reviewed by WILLIAM E. KENDALL

who is the Personnel Studies Coordinator of the Lago Oil and Transport Company at Aruba in the Netherlands Antilles. He once worked with Rensis Likert's group at Michigan. He is co-author with C. Harold Stone of Effective Personnel Selection Procedures (1956), and he is interested in the whole field of personnel management, but primarily concerned at present with employee-employer relationships.

An informal session with social science researchers inevitably turns to discussion of financing of research (inadequate and uncertain) and to consideration of the need for cross-communication (scientists are not aware of current operating problems, while practitioners lack familiarity with the implications, possible applications, and limitations of research findings).

In 1952, Rensis Likert, Director of Michigan's Institute for Social Research, took what may prove to have been a major step toward solution of these problems through creation of the Foundation for Research on Human Behavior. The Foundation does not plan to carry on research of its own but intends to serve as a source of financial support and, through its publications and seminars, as an interpreter and communicator of research results.

Leadership Patterns and Organizational Effectiveness in this volume summarizes a seminar organized around discussion of the conditions under which participative leadership methods can be effective, the values and hazards of incentive plans for securing increased productivity, and how a leader can achieve balance between apparently conflicting organizational objectives. Planning and Training for Effective Leadership reports on a seminar devoted to analysis of leadership practices and principles as they apply to different practical leadership situations and to approaches and methods that may be used in developing skilled leaders. A third seminar report, Training in Human Relations, is based on formal presentations and discussion of programs in operation at the International Harvester Company, Procter and Gamble Company, Detroit Edison Company, and the National Training Laboratory for Group Development.

The study of these reports makes one wonder with whom the Foundation is communicating, for the reports do not seem well suited for any one of the three or four potential audiences. For example, the personnel psychologist will notice that there is no new research reported. He will recognize the material presented since it has been given wide publicity through publication in professional and trade journals, in books, through speeches and conference presentations, and to some degree it has been reported in the popular press. And, he will note that where research is reported the interpretation advanced is equivocal. Yet criticism of these reports from the point of view of the personnel psychologist does not imply that they are written at a level or in a form suitable for a management audience. Condensation and simplification would be necessary before I could recommend them for the enlightenment of my management.

Psychological Surveys in Business Forecasting reports the proceedings of a seminar dealing with research on consumer behavior, business investment plans, and expectations of businessmen. In contrast with the above reports, ample data are cited in support of conclusions reached. Of particular interest are findings with respect to validity of predictions of consumer behavior made from survey data.

The fifth seminar report, Training Foreign Nationals in the United States, describes factors before, during, and subsequent to training which affect the success of individuals in these programs. The report closes with a statement of specific problems on which research is needed. The Foundation will attract favorable attention with reports such as this one.

Cortical Terra Still Incognita

D. A. Sholl

The Organization of the Cerebral Cortex. London: Methuen; New York: John Wiley & Sons, 1956. Pp. xvi + 125. \$4.25.

Reviewed by GEORGE CLARK

who is Associate Professor of Physiology at the University of Buffalo and a pendulum swinging between psychoneurology and neuropsychology, a guy who wants to know why behavior is as it is and who has been aggressively discontent with the answers for twenty years. A long time ago he and K. S. Lashley together undertook a critical evaluation of usefulness of the theory of cytoarchitectonics, one of Clark's first protests.

DOOK with an ambitious and unrealized title. Nevertheless, it is thoughtful and will be listed many times as recommended collateral reading. It has a basic division into two parts: one anatomical and the other physiological. The first half is largely based on the author's own work with Golgi material, while the second half is a review of the literature which at times is quite searching. Throughout the book there is a welcome amount of reference to older as well as to current literature. There are twelve plates of which eight are of Golgi preparations. All the figures are taken from previous publications of the author, and serious readers of this monograph will find it necessary to consult at least some of them.

Students of the functions of the cerebral cortex have long found it necessary to utilize some method for parcellation of the cortex into meaningful units. During the first half of this century cytoarchitectonics (the subdividing of the cortex into various units on the basis of the cellular structure as revealed by cell stains) was widely accepted and figures showing the parcellation of the human brain according to Brodman may be found in many elementary psychological and biological texts. In the past ten years this method has been under serious criticism and the few remaining staunch believers in cytoarchitectonics will find little succor in Sholl's treatment of the subject. For example, he states that "the number and boundaries of cortical laminae have resisted definition . . . consequently . . . they cannot form bases for any discussion of cortical organization that aims at precision." Nevertheless, he later introduces the concept of "zones of the cortex" and devotes considerable space to data based on this concept. The present reviewer can see no difference between "zones of the cortex" and the cortical laminae of the cytoarchitectonic

Any statistical treatment of the cerebral cortex must take into account not only the number of cells that may be excited but also the number of fibers that may excite these cells. Sholl attempts to do this through his concept of connective field density and on this principle rests any importance the monograph may have for fruitful theorizing. This connective field density is the ratio between the volume of a narrow shell around a nerve cell including its processes and the volume of the surround at varying distances from the center of the cell. Shell derives an equation for this ratio $(ke^{-6.036x})$, where x is the distance from the cell and k is a constant depending "on the size of the piece of cortex." This k is used repeatedly and the argument would be much improved by a more ex-

plicit definition. In view of current work on dendrites, it would seem that the concept of "connective field density" is at least premature and will probably need extensive revision. It is, nevertheless, an intriguing concept and those who wish to add some neurologizing to their theorizing may well find it worthy of consideration.

HE remainder of the book is largely a critical review of theoretical works on the function and the mode of function of the cerebral cortex. These Sholl divides into three classes: the qualitative, engineering, and mathematical approaches. The theories of Pavlov, Lashley, and Hebb he discusses, the latter two at some length, and then dismisses them, since "it is difficult to see in what way such theories are predictive." The cybernetic and similar engineering approaches he also dismisses on the basis that, while the brain might work on the same principles as the machine which performs what seems to be an analogous operation, "there is no evidence that it does so." He devotes a short chapter to the mathematical approach to this problem and mentions the concepts of Pitts and McCulloch, showing that they have serious limitations. He discusses several other theoretical studies and closes the chapter with a caution about premature studies.

Finally, let it be said, Sholl proposes, in spite of his title, no theory of cortical organization. His final word is: "Any theory that attempts to account for the properties of the dynamic spatiotemporal system that forms the basis of our behavior must imply statistical hypothesis."

W

These phenomena [of the motions of heavenly bodies], and some other which are explained in a similar manner, induce us to think that every thing depends on these laws by relations more or less concealed; but of which it is wiser to avow our ignorance than to substitute imaginary causes, for the sole purpose of dissipating our anxiety.

-PIERRE SIMON DE LAPLACE



Say It with Music

Leonard B. Meyer

Emotion and Meaning in Music. Chicago: University of Chicago Press, 1956.Pp. xi + 307. \$5.75.

Reviewed by LEONA E. TYLER

who, besides her best known interests in case work and individual differences, includes the psychology of music among the fields in which she wishes, as she says, "to garner ideas from the laboratory, the counseling room, the statistical work sheet, the novel, or the play." CP thinks that this review shows her competence in one field where its readers would not have expected her to turn up. She is Professor of Psychology at the University of Oregon.

An important book in a difficult area. Authors of books on the psychology of music must almost of necessity be more at home in one part of their field than in the other. Some have been psychologists whose choice of stimulus material for their experiments indicates that they certainly are not musicians. Some have been musicians who know so little of the general field of psychology that they do not hesitate to elaborate preposterous theories of their own about human nature. Some have been philosophers who deduce from what they believe to be general laws of perception broad general principles that will explain all of musical experience. Meyer can be classified in none of these categories. His occupational label is musician rather than psychologist, but he is familiar with a considerable portion of the psychological writing on esthetics, and he produces generalizations that are not in conflict with known facts based on research.

It may even be fortunate that he knows just this much psychology and no more. By confining his attention to a small fraction of the things that have been said about the essential nature of emotions, he is able center his own ideas around one proposition. He summarizes what he calls the psychological theory of emotions in this way: "Emotion or affect is aroused when a tendency to respond is arrested or inhibited." Music is a means of arousing such tendencies or

expectations and then *delaying* the release of the resulting tension. Because this is done under circumstances in which the hearer knows that release will eventually occur, the emotional experience the process gives rise to is a pleasant rather than an unpleasant one.

By means of this single thesis and its implications, the author succeeds in cutting himself loose from arguments that have dominated for decades most of the published thinking about what music means. His scheme makes a place for both absolute music and referential or program music. It accounts for both the kind of form qualities that lead to conclusions about music as a universal language and the kind of learning that brings about marked changes in listeners' responses to originally unfamiliar musical styles. It establishes the meaning of music as both an intellectual and an emotional phenomenon. The two kinds of report listeners give are "different manifestations of a single psychological process." All sorts of factors, internal and external, cultural, historical and personal, contribute to the inital set of the listener. The way in which this set is modified by patterned auditory stimulation constitutes musical communication.

The evidence used to support these generalizations is of a musical rather than an experimental nature. In some sections the author shows what composers have actually done to produce expressive qualities in particular passages. In others he draws on the writings of music critics and the reports of anthropologists and historians about musical systems different from our own. Breadth of outlook is one of the best qualities of this book. Each idea is tested against what is known about Oriental music, primitive music, and the music of earlier historical periods, as well as our familiar Western European body of work.

Meyer's theory accounts in a very satisfactory way for the facts it attempts to explain. A skeptical psychologist, however, must always ask whether it is possible that some other theory might account for them equally well. The crucial evidence must come from experimental work, which would have to be different from the bulk of the work done in this field in the past, for subjects should be listeners who are sophisticated enough to respond to what a composer is

PSYCHOLOGIA

-An International Journal of Psychology in the Orient-

This journal hopes to act as a channel of communication and feedback from East to West. It publishes symposia, general surveys, original material, international discussions, news, etc., from Japan, India, and other Asian countries.

EDITORIAL BOARD: Koji Sato, Editor (Kyoto University); Sadaji Takagi (University of Tokyo), Tatsuro Yatabe (Waseda University.)

ADVISORY BOARD: G. W. ALLPORT, L. J. CRONBACH, C. H. GRAHAM, O. H. MOWRER, T. M. NEWCOMB, E. C. TOLMAN, all of the United States; S. K. Bose (India); and other representative European and Asian psychologists.

CONTENTS (Partial List)

Volume 1, No. 1 (June 1957)

Obonai, Motokawa, and Yokose: Symposium; Structure of Induction Field in Visual Perception

K. Sato: Japanese Studies on Transposition Problems

U. PAREEK: Psychology in India

K. IMANISHI: Social Behavior of Japanese Monkeys

M. MURAKAMI: Arieti's Interpretation of Schizophrenia

Volume 1, No. 2 (Dec. 1957)

H. Kodama: Personality Tests in Japan

Nobechi et al. "Study of Values" of Japanese Students

S. Asayama: Comparative Study of Sexual Development of American and Japanese Boys

Publication 1957–1958, two numbers per year; from 1959, quarterly.

Subscription price \$3.00 for two issues, \$5.00 for four issues (including postage)

Address subscriptions to:

PSYCHOLOGIA SOCIETY Department of Psychology Kyoto University Kyoto, Japan attempting to communicate. There is no reason to suppose that the average college sophomore or grade-school child has at the outset the kind of expectations that would prepare him to respond to the subtle emotional meanings embodied in a complex musical work.

Reading this book has reinforced the reviewer's belief that psychologists, for the good of their own science, need to consider esthetic problems. Until we know why men seek the kind of experience Meyer has tried to explain and how they learn to organize these complex patterns of auditory stimulation, theories of motivation and learning must necessarily be warped and incomplete. Psychology stands to benefit at least as much as music from a better understanding of the nature of musical experience.

Getting the Focused Interview in Focus

Robert K. Merton, Marjorie Fiske, and Patricia L. Kendall
The Focused Interview: A Manual of Problems and Procedures.

Glencoe, Ill.: Free Press, 1956. Pp. xx + 186. \$3.00.

Reviewed by Charles G. McClintock

Dr. McClintock is a member of the Department of Psychology at Santa Barbara College of the University of California. He is interested in attitudes, group dynamics, theories of personality, and method in social sciences, and he has a background in social and clinical psychology at the University of Michigan. Since CP found the nature of the focused interview difficult to understand, it asked Dr. McClintock to discuss the general problem in connection with this review.

THIS revision of an Columbia Unigraphed monograph (Columbia Unigraphed Monograph (Columbia Unigraphed Monographed THIS revision of an earlier mimeoversity, 1952) of the same title describes a method of the collection of data developed to determine the responses of individuals to specific communication situations—a movie or a speech, for example. The authors, however, feel that the method has a more general applicability to "experimental studies of effects, and inquiries into patterned definitions of social situations." Although the major emphasis in this book is upon the procedural and technical aspects of focused interviewing, it is important that the approach be considered in terms of its relationship to other methods of the collection of data.

In the social sciences there exist three major techniques for obtaining information concerning human behavior. (a) Observational methods are employed to

measure directly overt responses to observable situations. An example of this technique is found in the observer category systems and rating scales developed by Bales and others. (b) Interview and questionnaire methods are utilized to obtain the subject's verbal report of his personal definition or his subjective experience in given situations or both. The most frequent use of these methods is found in studies attempting to measure persons' attitudes, beliefs, or values. (c) Finally, projective methods are employed in gaining access to processes assumed to be operative within the individual, processes not subject to direct observation, about which the individual is unwilling or unable to report reliably. In projective methods, like Murray's TAT, the investigator infers the operation of inner processes such as motivations, defense mechanisms, and values from the manner in which the person structures a more or less ambiguous stimulus situation cognitively and affectively.

Focused interviewing is primarily an interviewing method insofar as heavy emphasis is placed upon the subject's verbal report of his definition of a specific situation and response to it. However, the method simultaneously possesses certain characteristics which closely parallel those found in projective and observational methods. Thus, during the

course of the interview, the interviewer utilizes certain projective techniques to assess and interpret discrepancies which occur between the investigator's appraisal and the subject's report of the stimulus situation. The unique characteristic of this method, however, is the investigator's objective assessment of the particular situation to which subjects are to be exposed. This one step, commonly embodied in observational procedures, enables the investigator (1) to develop an hypothesis regarding expected and appropriate subject responses. (2) to focus the interview upon the subject's definition of and his responses to a particular situation, and (3) to assess and interpret discrepancies occurring between his objective definition and the subject's subjective definition of the situation. The inherent disadvantage of this method is its limitation to instances where the investigator is able to obtain an objective measurement of a specific social situation to which all subjects will be exposed. This specific limitation becomes more serious when one recognizes that within the social sciences there has been relatively little success in objectively defining any simple or complex social situation.

HE MAJOR portion of this book is devoted to a discussion of the appropriate behaviors for focused interviewers, and an elaboration of the typical problems they may expect to encounter. The authors maintain that the interviewer's approach should be nondirective except in those instances where this procedure does not provide sufficient information. The specific techniques prescribed for interviewers parallel those suggested by Rogers for nondirective therapists. In general, the interviewer's behavior is dictated by his goal of obtaining and interpreting as much phenomenal data as possible about the subject's definition of a specific social situation and his reactions to it.

In considering the specific behaviors prescribed for focused interviewers, two observations seem appropriate. First, the range and depth of phenomenal data obtained is maximized by the flexibility of the interviewer's behavior. The subject plays a central role not only in responding to questions by the inter-

Still Available

PSYCHOANALYSIS

AS SEEN BY ANALYZED PSYCHOLOGISTS

This well-known symposium, originally published in the *Journal of Abnormal and Social Psychology* in 1940 and 1941 and totaling some 160 pages, includes the following articles:

"Was This Analysis a Success?" by Edwin G. Boring with comment by Hans Sachs; "Psychoanalytic Phenomena" by Carney Landis; "The Position of Psychoanalysis in the Science of Psychology" by J. F. Brown; "Some Articulations Between Psychoanalysis and the Rest of Psychology" by Raymond R. Willoughby; "Psychoanalysis, Psychology, and Education" by Percival M. Symonds; "What Should Psychologists Do About Psychoanalysis?" by Henry A. Murray; "Psychoanalysis and Personality Research" by Else Frenkel-Brunswik; "One Psychologist as Analysand" by David Shakow; "Another Psychologist Analyzed" by Austin B. Wood; "A Critical and Experimental Study of Repression" by Donald V. McGranahan; and "A Jury Trial of Psychoanalysis" by Franz Alexander.

Price, \$2.00

Please address your orders to:

American Psychological Association

1333 Sixteenth St., N.W. Washington 6, D.C.

viewer, but in defining what questions are appropriate. The interviewer limits himself to keeping the subject oriented to the relevant situation, and in aiding him to recall how he responded to it. The unstructured nature of the interview situation prescribed by this method leads, however, to some serious limitations. The basic disadvantages center around the question of the scientific utility of the data. The authors, although suggesting focused interviewing as a possible experimental method, fail to answer the basic questions of the reliability and validity of the data obtained. Although they make passing reference to the fact that these are important considerations in any interviewing procedure, they leave unanswered the difficult problem of the comparability of the interview situation between subjects. The nature of focused interviewing would lead one gravely to doubt that the data obtained could meet even a minimal level of reliability. The authors seem to rationalize their omission of this problem by placing compensatory emphasis upon the artistic and empathic skills needed by the interviewer.

This manual should provide stimulating reading for those who are concerned with the basic methodology of interviewing. The authors have outlined an approach which combines many of the advantages of observational, interview, and projective methods. In addition, they have systematically defined and clearly illustrated many of the problems encountered in interviewing, especially if it is nondirective in its orientation. This book should, moreover, be of interest to persons in clinical psychology, for many of the problems discussed parallel those which arise within the interpersonal setting of therapy. One must note, however, that the authors have not provided any new insights into how objectively to define social situations, a prerequisite to the effective use of their method, nor have they been able to suggest how one realizes sufficiently reliable data in using focused interviews to carry on experimental research. It is, of course, too much to expect that this book should provide the answers to these two basic problems of the social sciences.

NOW AVAILABLE

Psychology and Mental Health

A Report of the Institute on Education and Training for Psychological Contributions to Mental Health, held at Stanford University in August, 1955.

Edited by
CHARLES R. STROTHER

Topics discussed at the Institute:

TRAINING NEEDS OF PSYCHOLOGISTS IN COMMUNITY MENTAL HEALTH

SPECIALIZATION IN TRAINING

PRACTICUM TRAINING

TRAINING FOR THERAPY

Training for Research in the Mental Health Field

PROBLEMS OF DEPARTMENTAL ORGANI-ZATION

Price: \$1.75

Order from:

AMERICAN PSYCHOLOGICAL ASSOCIATION, INC. 1333 Sixteenth Street N.W. Washington, D.C.

FILMS

By ADOLPH MANOIL, Film Editor

Film Review

ANIMAL PSYCHOLOGY

Sexual Behavior in Laboratory Monkeys (Macaca Mulatta).

H. E. Rosvold and L. Z. Freedman, 16-mm. motion picture film, sound, 30 min., 1955. Available through Psychological Cinema Register, Audio-Visual Aids Library, The Pennsylvania State University, University Park, Penna. (Showings restricted.) \$200.00, rental \$8.00.

Characteristic aspects of sexual behavior in monkeys are clearly illustrated.

The film is part of a research project aimed at the definition and quantification of specific sexual behavioral patterns.

Observations were made on male and female monkeys differently paired: each male in turn with each of four females.

The animals were left in separate cages except for the periods of observation when the pairs were put in the same cage, the male first and five minutes later the female. The animals were observed before, during, and after estrous that was induced through the use of a pellet of pure crystalline estradiol (Schering Progynon). The behavioral categories used were: erection, distance, anxiety behavior (trembling, grimacing, licking, urinating), aggression, grooming, presenting, copulation (mounting, intromitting, ejaculation), and masturbation.

The film illustrates these behavioral patterns and demonstrates the possibility of their indentification and quantification as to duration and frequency.

During estrous there is marked decrease in masturbation, distance (as maintained by various pairs), anxiety in the females, and aggression in the males. During the same phase there is significant increase in grooming, oral activity, and the other sexual behavioral patterns.

The film as a whole represents a demonstration of research on sexual behavior in laboratory monkeys. Through the systematic observation and scoring of various behavioral categories as illustrated,

it should be possible, as stated in the film, "to reliably judge the effects of such things as brain-lesions, hormones, punishment, and developmental experience on sex-behavior."

The film could be profitably used with advanced classes in animal psychology and also as a research demonstration.

The usefulness of the film as a demonstration in animal experimentation would be increased if it were supplemented with a guide giving data on the animals used and the statistical results.

As indicated in the title the showing of this film is restricted and it could be used only upon a special agreement with the Psychological Cinema Register.

Films and Other Materials

FILMS

The Child in the Middle. 16-mm., black and white, sound, 18 min., 1957. Written under the guidance of Faith Smitter. Available through Educational Film Sales Department, University of California, Los Angeles 24, Cal. \$67.50, rental \$3.00.

Presents parent-teacher cooperative approach to the understanding of the elementary school child.

The Mayas. 16-mm., black and white or color, sound, 11 min., 1957. Produced by Coronet Films. I. James Quillen, Stanford University, educational collaborator. Available through Coronet Films, Coronet Bldg., Chicago 1, Illinois. \$55.00, color \$100.00.

A general survey of Mayan civilization at the level of the high-school student.

Step by Step. 16-mm., black and white, sound, 24 min. Produced at City College of New York. Available through International Film Bureau, Inc., 57 E. Jackson Blvd. Chicago 4, Illinois. \$95.00, rental \$5.00.

Social work approach to the study of juvenile delinquency. Case work and gang activities shown.

Whoever You Are. 16-mm., black and white, sound, 20 min. Available through International Film Bureau Inc., 57 E. Jackson Blvd., Chicago 4, Illinois. \$65.00, rental \$4.00.

Community approaches to the understanding and elimination of race prejudice and religious intolerance are presented.

TV PROGRAMS

Not in Our Stars. A series of thirteen TV programs. Fred McKinney, Missouri Univ., main writer and performer. 16-mm., motion picture films (kinescopes), 30 min. each, 1956. Available through Educational Television and Radio Center, National Educational Television, 1610 Washtenaw Ave., Ann Arbor, Michigan. \$30.00 per half-hour program for use over one station, \$50.00 for two stations.

The title of the series is taken from Shakespeare:

"The fault, dear Brutus, is not in our stars.

But in ourselves, that we are underlings."

(Julius Caesar, 1, 11).

The kinescopes, each 16-mm., black and white, sound, 30 min., that are included in the complete series of *Not in our Stars* are:

Our Handicaps

Through the presentation of activities at the School for the Deaf, Fulton, Mo., major handicaps are illustrated and reeducation work demonstrated.

Fear and Anxiety

Emotion is analyzed and exemplified as a learning process.

Hobbies and Interests

Hobbies and interests are presented as means to develop skills and find enjoyment in life.

Handling Strong Feelings

Strong emotional responses are illus-

trated. Various approaches to tension reduction through finger-painting, writing, music, and other means, are also shown.

Getting Along with Others

The problem of human relations is analyzed and illustrated through the presentation of interviews with 'successful' individuals.

Self-Confidence

Through interviews and a counseling session self-confidence is presented as a learning process.

Breaking Habits

Acquiring habits and their unlearning is presented as a function of individual needs.

Work

Work as an adjustment to life as well as various vocational guidance methods are illustrated.

Mistakes

The meaning of common mistakes as well as their appropriate handling is illustrated and discussed.

Maturity

Physical and psychological aspects of maturity are discussed.

Our Differences from Others

Individual differences as a function of heredity and environment are analyzed.

The importance of individual's attitudes toward these differences is emphasized.

Friends

Various psychological aspects of friendship and its value for individual adjustment are illustrated.

Conflicts

Different types of conflict and suggestions for their appropriate resolution are analyzed and illustrated.

REFERENCES AND GUIDES TO FILMS

 JEAN-PIERRE BARROT and GINETTE BILLARD. Films pour enfants et adolescents. Selection faites dans 22 pays. UNESCO: Reports and Papers on Mass

- Communication, No. 19, 1956. Pp. 118.
- MARY L. ALLISON, EMILY S. JONES, and EDWARD T. SCHOFIELD. A manual for evaluators of films and filmstrips. UNESCO: Reports and Papers on Mass Communication, May, 1956, No. 18. Pp. 23.
- International rules for the cataloguing of educational, scientific and cultural films and filmstrips. Reports and papers on mass communication. UNESCO, Paris: Clearing House. Department of Mass Communication, May, 1956, No. 17. Pp. 53.
- Mental health motion pictures 1956. Supplement to "A selective guide." 1952. U. S.
 Department of Health, Education, and Welfare. Public Health Service. Washington 25, D. C.: U. S. Government Printing Office, 1956. Pp. 80. 30 cents.
- Repertoire mondial des périodiques cinématographiques (World list of film periodicals and serials). (French and English.) Biblilgraphie Internationale du Cinéma (The International Film Bibliography) Bruxelles, Belgium: La Cinématheque de Belgique, 1955. Pp. X + 127.

BOOKS RECEIVED

- BALSER, B. H. (Ed). Psychotherapy of the adolescent. New York: International Universities Press, 1957. Pp. 270. \$5.00.
- BAUMGARTEN, FRANZISKA. Berufs- und sozialpsychologische Untersuchungen bei Arbeitern. Zürich: Rascher Verlag, 1956. Pp. 150. S. fr. 16.30.
- BAUMGARTEN, FRANZISKA. Zu spät: von der tragik menschlichen Handelns. Zürich: Rascher Verlag, 1952. Pp. ix + 150.
- Bertolini, Piero. Educazione e scautismo. Bologna: Edizioni Guiseppe Malipiero, 1956. Pp. xix + 275. L. 1500.
- Beutner, K. R., & N. G. Hale, Jr. Emotional illness: how families can help. New York: G. P. Putnam's Sons, 1957. Pp. 158. \$2.75.
- BIER, W. C., S. G. DIMICHAEL, & R. J. McCall (Eds.). Perception in present-day psychology. (A Symposium held at the 10th Annual Meeting of the American Catholic Psychological Association, Chicago, 1 Sept. 1956.) New York: American Catholic Psychological Association, Chicago, 1 Sept. 1956.) New York: American Catholic Psychological Association [1957]. Pp. vii + 109. \$1.00.
- Bluemel, C. S. The riddle of stuttering. Danville, Ill.: Interstate Publishing Co., 1957. Pp. 142. \$3.50.
- CARTER, H. L. J., & DOROTHY J. McGINNIS.

 Effective reading for college students. (Nila
 Banton Smith, General Editor.) New
 York: Dryden Press, 1957. Pp. z + 354.

 \$3.60
- COHEN, ALBERT, ALFRED LINDESMITH, & KARL SCHUESSLER (Eds.). The Sutherland papers. Bloomington: Indiana University Press, 1956. Pp. vi + 330. \$5.00.
- Condoyannis, G. E. Scientific German: a concise description of the structural elements of scientific and technical German. New York: John Wiley & Sons, 1957. Pp. x + 164. \$2.50.
- DAVIDSON, DONALD, & PATRICK SUPPES, in

- collaboration with Sidney Siegel. Decision making: an experimental approach. Stanford, Calif.: Stanford University Press, 1957. Pp. 121. \$3.25.
- DONIGER, SIMON (Ed.). Healing: human and divine. New York: Association Press, 1957. Pp. 254. \$3.00.
- DONOHUE, J. K. "Baffling eyes of youth." New York: Association Press, 1957. Pp. 251. \$3.50.
- EYSENCK, H. J. Sense and nonsense in psychology. Baltimore: Penguin Books, 1957.
 Pp. 349. \$.85.
- FAIRFIELD, LETITIA. Epilepsy: grand mal, petit mal, convulsions. New York: Philosophical Library, 1957. Pp. 159. \$4.75.
- FELDMAN, FRANCES LOMAS. The family in a money world. New York: Family Service Association of America, 1957. Pp. iv + 188. \$2.50.
- FISCHGOLD, H., & H. GASTAUT (Eds.). Conditionnement et réactivité en électroencéphalographie. (Supplement No. 6 of Electroencephalography and Clinical Neurophysiology: An International Journal.)

 Paris: Masson & Cie., 1957. Pp. xiii + 475. 5800 fr.
- FISHBEIN, MORRIS, & RUBY JO REEVES KENNEDY (Eds.). Modern marriage and family living. New York: Oxford University Press, 1957. Pp. xvii + 545. \$5.00.
- FOULKES, S. H., & E. J. ANTHONY. Group psychotherapy: the psycho-analytic approach. Baltimore: Penguin Books, 1957. Pp. 263. \$.85.
- Funkenstein, D. H., S. H. King, & Margaret E. Drolette. Mastery of stress.

 Cambridge, Mass.: Harvard University
 Press, 1957. Pp. xv + 329. \$6.00.
- GROUP FOR THE ADVANCEMENT OF PSYCHI-ATRY. Committee on Social Issues. Psychiatric aspects of school desegregation. (Report No. 37.) New York: Group for the Advancement of Psychiatry, 1957. Pp. 95. \$1.00.

Halmos, Paul. Towards a measure of man: the frontiers of normal adjustment. London: Routledge & Kegan Paul, 1957 (distributed by Humanities Press, New York). Pp. viii + 250. \$5.50.

HIMWICH, H. E. (Ed.). Alcoholism: basic aspects and treatment. (A Symposium held under the auspices of the American Association for the Advancement of Science in cooperation with the American Psychiatric Association and the American Physiological Society, Atlanta, Ga., 27-28 Dec. 1955.) Washington, D. C.: American Association for the Advancement of Science, 1957 (Publication No. 47). Pp. viii + 212. \$5.75.

Hoop, O. E. Your child or mine: the braininjured child and his hope. New York: Harper & Brothers, 1957. Pp. x + 180.

JUNG, C. G. Collected works. Vol. I: Psychiatric studies. (Trans. by R. F. C. Hull.) New York: Pantheon Books, for the Bollingen Foundation, 1957 (Bollingen Series XX). Pp. xiii + 269. \$3.75.

LOCKE, W. N. Scientific French: a concise description of the structural elements of scientific and technical French. New York: John Wiley & Sons, 1957. Pp. x 112. \$2.25.

LONERGAN, B. J. F. Insight: a study of human understanding. New York: Philosophical Library, 1956. Pp. xxx + 785. \$10.00.

LOUTTIT, C. M. Clinical psychology of exceptional children. (3rd ed.) New York: Harper & Brothers, 1957. Pp. xii + 573. \$6.00.

MADIGAN, MARIAN EAST. Psychology: principles and applications. (2nd ed.) St. Louis: C. V. Mosby, 1957. Pp. 391. \$4.75.

MILLARD, C. V., & J. W. M. ROTHNEY. The elementary school child: a book of cases. New York: Dryden Press, 1957. Pp. xii + 660. \$4.90.

MORENO, J. L. First book on group psychotherapy. (3rd ed.; Psychodrama and Group Psychotherapy Monographs, No. 30.) Beacon, N. Y.: Beacon House, 1957. Pp. xxiv + 138. \$3.50.

NATIONAL LEAGUE FOR NURSING, INC. Test Construction Unit. The construction and use of teacher-made tests. (Pamphlet No. 5.) New York: National League for Nursing, Inc., 1957. Pp. 102. \$2.50.

Newcomb, T. M. Personality and social change: attitude formation in a student community. (2nd ed.) New York: Dryden Press, 1957, 1957. Pp. xii + 225. \$3.25.

NORRIS, MIRIAM, PATRICIA J. SPAULDING, & FERN H. BRODIE. Blindness in children. Chicago: University of Chicago Press, 1957. Pp. xv + 173. \$3.00.

NORTHWAY, MARY L., & LINDSAY WELD. Sociometric testing: a guide for teachers.

Toronto: University of Toronto Press, 1957. Pp. vii + 72. \$1.95.

PHILLIPS, HELEN U. Essentials of social group work skill. New York: Association Press, 1957. Pp. x + 180. \$3.50.

PIKUNAS, JUSTIN. Fundamental child psychology. Milwaukee: Bruce Publishing Co., 1957. Pp. xviii + 259. \$3.50.

ROGERS, DOROTHY. Mental hygiene in elementary education. Boston: Houghton Mifflin, 1957. Pp. xi + 497. \$5.50.

Schwartz, Alfred, & S. G. Tiedeman, with the assistance of D. G. Wallace. Evaluating student progress in the secondary school. New York: Longmans, Green, 1957. Pp. xi + 434. \$4.75.

SEARS, R. R., ELEANOR E. MACCOBY, & HARRY LEVIN. Patterns of child rearing. Evanston, Ill.: Row, Peterson, 1957. Pp. vii + 549.

SLOSSEN, RICHARD. Child guidance: a mental health skit for amateur production. Pp. 59. The discussion leader's guide. Pp. 118. Buffalo, N. Y.: Office of Health Education, Erie County Health Department, 1957.

STECKLE, L. G. Problems of human adjustment. (Rev. ed.) New York: Harper & Brothers, 1957. Pp. xi + 419. \$6.00.

STERN, EDITH M. Mental illness: a guide for the family (Rev. ed.) New York: Harper & Brothers, 1957. Pp. xix + 95. \$2.50.

STOGDILL, R. M. Leadership and structures of personal interaction. (Ohio Studies in Personnel; Bureau of Business Research Monograph No. 84.) Columbus: Bureau of Business Research, College of Commerce and Administration, Ohio State University, 1957. Pp. xiii + 90. \$2.00.

STONE, L. J., & JOSEPH CHURCH. Childhood and adolescence: a psychology of the growing person. New York: Random House, 1957. Pp. xvii + 456. \$6.50.

STRACHEY, ALIX. The unconscious motives of war: a psycho-analytic contribution. New York: International Universities Press, 1957. Pp. 283. \$5.00.

SUPER, D. E. The psychology of careers. New York: Harper & Brothers, 1957. Pp. x + 362. \$5.75.

Symonds, P. M. Dynamics of psychotherapy: the psychology of personality change. Vol. II: Process. New York: Grune & Stratton, 1957. Pp. xlv + 175-398 [224]. \$6.50.

Tashman, H. F. Today's neurotic family: a journey into psychoanalysis. New York:
New York University Press, for the Laymen's Institute for Psychoanalytic Enlightenment, 1957. Pp. vii + 214.

TAYLOR, R. W. (Ed.). Life, language, law: essays in honor of Arthur F. Bentley. Yellow Springs, Ohio: Antioch Press, 1957. Pp. xii + 223. \$4.50.

TEMPLIN, MILDRED C. Certain language skills in children: their development and interrelationships. (Institute of Child Welfare Monograph No. 26.) Minneapolis: University of Minnesota Press, 1957. Pp. xviii + 183. \$4.00.

TRAVIS, L. E. (Ed.). Handbook of speech pathology. New York: Appleton-Century-Crofts, 1957. Pp. viii + 1088. \$12.00.

TRAXLER, A. E. Techniques of guidance. (Rev. ed.) New York: Harper & Brothers, 1957. Pp. xiii + 374. \$6.00.

TRAXLER, A. E. (Ed.). Vital issues in education. (Report of the 21st Educational Conference held under the auspices of the Educational Records Bureau and the American Council on Education, New York, 1-2 Nov. 1956.) Washington, D. C.: American Council on Education, 1957. Pp. viii + 176. \$2.00.

VIITAMÄKI, R. O. Personality traits between puberty and adolescence: their relationships, development and constancy with reference to their relation to school achievement. (Annales Academiae Scientiarum Fennicae, ser. B, tom. 104.) Helsinki: Suomalainen Tiedeakatemia, 1956. Pp. 183. 700 mk.

VOEKS, VIRGINIA On becoming an educated person: an orientation to college. Philadelphia: W. B. Saunders, 1957. Pp xv + 147. \$2.00.

VON FIEANDT, KAI. Varseblioningens psykologi. (Trans. from Finnish into Swedish by U. von Troil.) Helsingfors: Söderström, 1956. Pp. 370.

WERNER, HEINZ. Comparative psychology of mental development. (Rev. ed.) New York: International Universities Press, 1957. Pp. xii + 564. \$6.00.

WILENSKY, H. L. Intellectuals in labor unions: organizational pressures on professional roles. Glencoe, Ill.: Free Press, 1956. Pp. xiii + 336. \$6.00.

WILEY, JOHN, & SONS, INC. The first one hundred years: a history of John Wiley and Sons, Inc. New York: John Wiley & Sons, 1957. Pp. xxv + 242. \$7.50.

WOLFENSTEIN, MARTHA. Disaster: a psychological essay. Glencoe, Ill.: Free Press, 1957. Pp. xvi + 231. \$4.00.

WORMHOUDT, ARTHUR. Hamlet's mouse trap: a psychoanalytical study of the drama. New York: Philosophical Library, 1956. Pp. 221. \$3.50.

YATES, DOROTHY HAZELTINE. Psychology you can use. New York: Thomas Y. Crowell, 1957. Pp. viii + 248. \$3.95.

ZAEHNER, R. C. Mysticism sacred and profane: an inquiry into some varieties of praeternatural experience. New York:
Oxford University Press, 1957. Pp. xviii + 256. \$6.75.

Statistics

Elementary Statistics

By BENTON J. UNDERWOOD, CARL P. DUNCAN, JANET A. TAYLOR, and JOHN W. COTTON

The purpose of this text is to give students an understanding of the use of statistics in analyzing research data in social sciences, with particular emphasis on psychological data.

The book concentrates on statistics as a tool to be applied to actual research situations rather than on statistical methods as such.

248 pages. \$3.25

Workbook to Accompany Elementary Statistics

By THE SAME AUTHORS

This question and exercise book provides the student with ample practice in analyzing research data.

103 pages. \$1.50

Experimental Psychology: An Introduction

By BENTON J. UNDERWOOD
This text provides the student with
the fundamental concepts of experimental psychology and the basic
experimental designs. A critical
approach to experimental methods
is encouraged by a thorough evaluation of both poorly and well designed experiments.

638 pages. \$5.00

Learning

Theories of Learning 2nd Edition

By ERNEST R. HILGARD Presents an up-to-date pic-

Presents an up-to-date picture of modern learning theories.

Includes new chapters on "Freud's Psychodynamics", "The Emergence of Mathematical Models," and "Current Developments".

Contains a clear and sympathetic, yet critical, exposition of the most influential positions in learning theory which are current among psychologists doing research in the field.

Provides bibliographies, footnotes, indices, and 67 line illustrations.

563 pages, illustrated. \$5.50

APPLETON CENTURY CROFTS, Inc.

35 West 32 Street New York 1, N. Y.



Counseling

The Work of the Counselor

By LEONA E. TYLER.

323 pages. \$3.00

Readings in Modern Methods of Counseling

> ARTHUR H. BRAYFIELD, Editor.

> > 526 pages. \$5.00

Psychological
Counseling
By EDWARD S. BORDIN.

409 pages. \$5.00

Vocational Counseling with the Physically Handicapped By LLOYD H. LOFQUIST.

384 pages. \$5.00

A Casebook of Counseling

By ROBERT CALLIS, PAUL C. POLMANTIER, and EDWARD C. ROEBER.

352 pages. \$5.00

Adjustment, Application, and Adolescence: notes on three Prentice-Hall textbooks

Adjustment presented as a continuing, lifelong learning process is the theme of DYNAMICS OF PERSONAL ADJUSTMENT, by George F. J. Lehner and Ella A. Kube. Designed as a basic text for courses in Psychology of Adjustment, Psychology of Personality, Mental Hygiene, etc.—the book has also been used with much success as a general text in introductory courses where the student's personal adjustment problems are stressed. Lehner is a clinical psychologist, Kube a social psychologist; their collaboration has produced a text which provides students with a unique insight into both the personal and social dynamics which operate in their lives. Published in 1955, the book is 498 pages in length and costs \$5.75.

Application of psychology to practical problems in social and business situations is the keynote of Harry W. Hepner's PSYCHOLOGY APPLIED TO LIFE AND WORK, 3rd Edition (1957). Long the leader in its field (over 265,000 copies of the first two editions were sold), the text has benefited from a thorough up-dating and revision, and the addition of new ideas, topics, and illustrations. The text now includes discussions on group dynamics, communications, the effects of automation, and the current trends in industry. If you teach General Psychology (with stress upon applied psychology), Business Psychology, Personnel Management, or Applied Psychology, 'Hepner' may well be the best text for your purposes. Profusely, illustrated, the book is 639 pages in length and is priced at \$6.95.

Adolescence has been the subject of a number of important studies in recent years, and any textbook dealing with adolescents must undergo regular revision if it is to reflect an accurate picture. Karl C. Garrison has consequently re-evaluated, reorganized, and rewritten his PSYCHOLOGY OF ADOLESCENCE to bring this long-popular text up to date. The 5th (1956) Edition pays increased attention to social class and adolescent values, and the sections on sex problems, vocational adjustments, and the influence of peers have been expanded. Though not neglecting physiological factors, the author emphasizes cultural and social influences on adolescent values. Priced at \$6.00, the text contains 529 pages.

To receive approval copies promptly, write: Box 903



